Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

March 11, 1957

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Increasing interest among MDs

The value of pyridoxine is receiving increased attention from physicians. The symposium on "Newer Vitamins" held under the auspices of the National Vitamin Foundation at Vanderbilt University summarized research work and pointed the way to new fields of investigation. As a result, doctors and diet experts are giving more study to the importance of the vitamin to health and nutrition.

Metabolic imbalance in pregnancy

Pyridoxine's particular place in the metabolism of tryptophane and other amino acids may be significant in correcting certain metabolic imbalances known to exist in some pregnancies.

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Oil, Paint and Drug Reporter

Vol. 171 No. 10 30 Church St., New York 7, N. Y. March 11, 1957

Super Repellent Developed

Department of Agriculture has released for commercial use what it says is the best all-purpose insect repellent so far developed—diethyl toluamide. The product will probably be available on the market this spring, the department thinks.

A product of research by USDA in cooperation with the Department of the Army, the new repellent can be safely applied to the skin or clothing and successfully protects the wearer against mosquitoes, chiggers, ticks, fleas and biting flies, it is reported.

It provides long-lasting protection for people who work outdoors, and its pleasant lotion "feel" is said to make it ideal for picnickers and backyard gardeners.

The repellent was synthesized some years ago by USDA chemists at the Agricultural Research Center, Beltsville, Md. Its promise as an insect repellent was revealed in later tests at the department's Orlando, Fla., entomology laboratory.

Resistance to rubbing is one of the repellent's best features. Some of any repellent applied to the skin may be absorbed, but much of it is simply worn away by normal activities of the wearer. A "wipe test" developed to measure this wearing-off action showed diethyl toluamide to be at least twice as long-lasting as the next best repellent, according to USDA.

The new repellent equals or surpasses other chemicals in repellent action against individual species of mosquitoes. More important, it gives better protection against mosquitoes generally than any other single chemical or combination of chemicals, it is said.

Clothing and other fabrics can be readily treated with diethyl toluamide by saturating them with emulsions or dry-cleaning preparations containing the chemical.

Explosives, Chemicals Laws On Transport Due for Overhaul If the ICC Can Have Its Way

Interstate Commerce Commission is asking congress to overhaul completely and bring up to date the laws governing the transportation of explosives in the United States. It wants written into the law a provision requiring that all motor trucks of the chemical and other industries be registered with the federal agency. Now they are subject only to the hours of service and safety regulations.

ICC's views are contained in letters forwarded to the senate and house interstate commerce committees last week and promptly dropped into the legislative mill of the senate by Sen. Warren G. Magnuson of Washington, chairman of the senate committee. The measures are S 1491 relating to explosives and other dangerous articles, and S 1490 dealing with registration of the motor carriers.

Aims of First Measure

The first bill has four objectives:

- To revise the existing laws in the light of important developments relating to the transportation of explosives and other dangerous articles which have occurred in the thirty-four years since the last revision.
- To provide authority to the ICC to regulate the transportation specifically of radioactive materials and etiologic agents.
- To make the laws applicable to contract and private carriers as well as to common carriers.

To tighten enforcement of the regulation by making it unnecessary to prove that a shipper "knowingly" failed to conform to requirements.

In justification for a general overhauling of the law, the commission notes a strong trend towards greater use of motor carriers in the transportation of explosives. Evidence supplied by the Institute of Makers of Explosives, it is stated, shows that the volume of commercial explosives consumed in this country which

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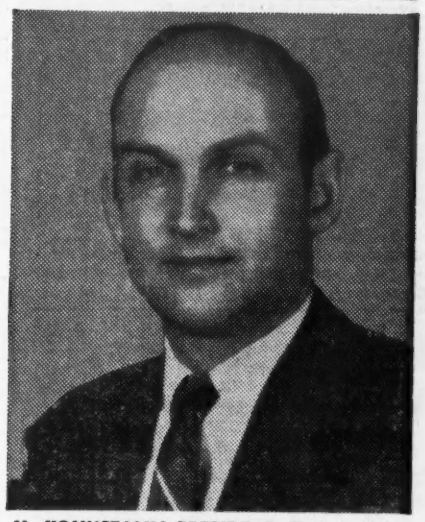


H. KOHNSTAMM PRESIDENT: Paul L. Kohnstamm, elected president of H. Kohnstamm & Co., New York, succeeding Louis J. Woolf who has been named chairman of the board. Robert H. Pulver, elected to the new post of executive vice-president.

Butadiene Plant Sale Measure Stalls on its Way Through Senate

The administration's bill to sell the big alcohol butadiene plant at Louisville, Ky., to private industry for general chemical manufacturing purposes is stalled in the senate, as of last week. Responsibility for blocking the proposal rests chiefly with the Presidential Commission on New Industrial Uses of Agricultural Products and the farm bloc. The 60,000 ton plant has been a white elephant to the government since its use in supplying butadiene for synthetic rubber became no longer economically feasible in the face of the cheaper petroleum-based butadiene.

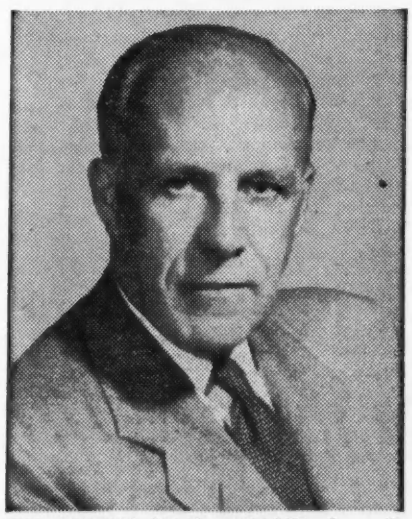
Sale of the facility has been approved by the unanimous vote of the house, and, until a few days ago, it was expected that the senate would speedily concur.

Farm Senators' Idea

But farm state senators recently seized upon the idea that the plant might possibly serve a useful purpose for the government in providing a nucleus for a stepped-up research program for the benefit of agriculture, and started a campaign to delay the bill until this idea could be more fully explored.

Their campaign was seen capped with success in the midst of hearings by a subcommittee of the senate banking committee on the bill, HR 2528, late last week when a letter was produced by chairman Paul Douglas of Illinois from the Presidential Commission on New Industrial Uses for Agricultural Products urging the

—Continued on page 43



CSC GENERAL SALES MANAGER: James V. O'Leary, elevated by Commercial Solvents Corporation, New York, from sales manager of its biochemicals division to general sales manager of the company.

Imperial (Canada) Absorbing Color Unit

Imperial Paper & Color Corporation (Canada), Ltd., St. John's, Quebec, is taking over all the dry color operations of Brandram-Henderson, Ltd. An agreement between the two companies involves the purchase of Brandram-Henderson's dry color-making equipment, formulas, good will and customer lists. Imperial is a subsidiary of Imperial Paper & Color Corporation, Glens Falls, N. Y.

It is expected that Brandram-Henderson will cease its dry color manufacturing operations shortly. The decision was dictated by the necessity to provide additional space in the Montreal plant for the expansion of its growing paint manufacturing operations.

Texas City Reorganization Under Coronet Approved

The reorganization of Texas City Chemicals, Inc., under the management of Coronet Phosphate Company, a division of Smith-Douglass Company, Norfolk, Va., has been approved. Confirmation of the plan for reorganization was entered in the United States District Court for the Southern District of Texas last week.

As reorganized, the parent Smith-Douglass Company becomes the sole stockholder of Texas City Chemicals, which will be operated as a separate corporation under the management of the Coronet Phosphate Division.

The Texas City plant reopened in October, when the court agreed to entertain a reorganization plan. In February, dicalcium phosphate went on stream and the first carload of "Dikal," tradename for the company's dicalcium phosphate, was shipped.

Texas City Chemicals completed a large dicalcium phosphate plant in 1953 near Texas City. The facilities ceased operations in January of last year.

Metal & Thermit Building $3 Million Chemical Plant

Metal Thermit Corporation, New York, broke ground in Carrollton, Ky., last week for a $3 million chemical processing plant. The facility will initially produce a number of organotin chemicals used in vinyl plastics, transformer oils, biocidal and fungicidal agents, veterinarian medicines and other end products. Production of organic compounds of other metals such as zinc and cadmium is planned for the future.

H. E. Martin, president, said that construction is expected to be completed by December and after testing of manufacturing equipment the plant will be put into operation in January, 1958.

"In our first operating year we hope to turn out about 2.5 million pounds of chem-

—Continued on page 38

Monsanto Says Tariff Cuts Cost It $5 Million in Profits

Monsanto Chemical Company, St. Louis, Mo., figures it lost more than $5 million in unrealized potential profits last year because of tariff reductions. Furthermore, it calculates in its annual report, another $3 million in potential profits "were unrealized in part because of slashed tariffs."

Sterling Studying Disposal of Sewage

Sterling Drug, Inc., New York, and the Metropolitan Sanitary District of Greater Chicago are researching new methods for the disposal of sewage solids. Their efforts are concentrated on the Zimmerman Process, which was invented by Sterling engineers to eliminate stream pollution caused by organic wastes.

The cooperative field project will center at the Southwest Treatment Works of the Sanitary District, according to James Hill, jr., chairman of the board of Sterling Drug, and president Anthony Olis and general superintendent William A. Dundas of the sanitary district. The Southwest

—Continued on page 37

Indiana Standard's Worries About Over at Brownsville

Its troubles are about over at the Brownsville, Tex., plant for making gasoline and chemicals from natural gas. So says Standard Oil Company (Indiana), Chicago, in its annual report. Here's how the company puts it:

"We have apparently overcome the serious operating difficulties that plagued the Brownsville plant when it was owned by others, and which continued in part even after the extensive revamping which we carried out."

US Makes Sure Output Will Go On—Even Under Attack

The government last week revised its policies on defense mobilization to place greater emphasis on maintaining vital production capacity of the mobilization base in a state of readiness. The policy change was contained in order No. VII-7 issued by Arthur S. Flemming, director of defense mobilization.

Mr. Flemming said that the revised order was necessary to insure that the most important segments of the mobilization base should be maintained on such a footing so as to enable production to continue under a nuclear attack on the country.

The revised order stresses the importance of maintaining plants in a readiness condition to produce those military items which would be so urgent for the defense of the country that utmost effort must be exerted to produce them even in case of general war involving severe damage to the facilities.

Under the new policy, within the limits of funds available, the Department of Defense, the Atomic Energy Commission and the Maritime Administration will place current procurement in the facilities selected to produce the urgent items, and will equip these plants with any necessary tools and production equipment.

The procurement agencies are called upon also to develop and maintain plans for alternate production capacity in case disaster destroys these current facilities.

Nitric Acid Unit Goes on Stream

A new nitric acid unit, doubling the capacity of its plant at Newell, Pa., near Pittsburgh, has been put on stream by General Chemical Division of Allied Chemical & Dye Corporation, New York.

The plant has been built to serve consumers in the Pittsburgh; Cleveland, Ohio; and Delaware valley industrial areas.

Drug, Chemical Firms Told They Can Strike at Communism

Drug and chemical companies can combat Communism by participating with local boards of education in programs to employ science teachers during the summer recess. That, says J. David Hayden, chairman of the Drug, Chemical and Allied Trades section of the New York Board of Trade, will encourage more interest in science and help offset Russia's imminent leadership in scientists and engineers. Speaking before 2,600 industry leaders attending the thirty-first annual dinner in New York last week, Mr. Hayden stated:

"Between 1950 and 1960 Russia will graduate 1.2 million scientists. On the other hand, during this period the United States will graduate 900,000. Thus, by 1960 Russia will have surpassed America's technological manpower supply of scientists and engineers.

IN KEY PLASTICS POST: James P. Okie, appointed assistant general manager of the plastics division of Diamond Alkali Company, Cleveland, Ohio.

Russians Stress Science

"In Russian high schools 40 percent of the compulsory courses are in science and mathematics. By the time he graduates, the Russian student has had six years of biology, five years of physics, four years of chemistry, and four years of mathematics, including trigonometry.

"In America 53 percent of our high schools do not teach physics or chemistry," Mr. Hayden said.

"The drug and chemical industry," according to the speaker, "has performed outstanding service in efforts to encourage more interest in science through various student scholarships, university contribution plans, plant tours, participation in science fairs, and in many other ways.

"These programs have, of course, primarily been concerned with increasing the number of scientists. Equally significant, however, and possibly of even greater importance, the industry must also concern itself with efforts to further the professional competence and capacity of our teachers, so that they in turn will stimulate greater enthusiasm for science careers in their students.

"How many potential engineers and scientists are lost to other professions because the schoolroom theory is not stimulated by the flame of industrial processes?" Mr. Hayden asked.

"The Drug, Chemical and Allied Trades

—*Continued on page 58*

Drugs, Medicines Wage Hearing April 2

A public hearing will be held in Washington, D.C., April 2, to determine prevailing minimum wage rates under the Walsh-Healey public contracts act for the drugs and medicines industry, the Department of Labor has announced. The present determination is $1 an hour and has been in effect since October 7 on an industry-wide basis.

The act applies to government manufacture and supply contracts in excess of $10,000. It authorizes the Secretary of Labor to issue minimum wage determinations for industries obtaining such contracts, on the basis of the minimum wages he finds prevailing.

Government agencies in a recent twelve-

—*Continued on page 39*

Freeport Names President

Langbourne M. Williams, president of Freeport Sulphur Company, New York, has been elected chairman of the board. He replaces John Hay Whitney, who resigned recently upon his appointment as ambassador to the Court of St. James. Mr. Williams joined Freeport in 1930 and was named president in 1933. He will also continue in that position.

Uranium Hexafluoride Unit To Go Up in Metropolis, Ill.

Metropolis, Ill., on the Ohio River has been selected by Allied Chemical & Dye Corporation, New York, as the site for its multi-million dollar plant to produce uranium hexafluoride for sale to the Atomic Energy Commission. The location is also scheduled to become a production center for many other fluorine chemicals made by the company.

The new plant will be the first privately-owned plant to make uranium hexafluoride, the vital atomic war material which heretofore has been produced only in government-owned facilities. This development has been termed a "significant step in the commission's program to broaden industry participation in the atomic energy program."

Start-up date is expected to be sometime late in 1958 or early 1959.

The Week's Price Changes

NF Grade Phenothiazine, Rock and Table Salt Advance in Price. Platinum Metal, Lithium Hydroxide Monohydrate Decline.

Prices Advanced

Cocoa butter, 1c. per lb. (p. 63).
Greases, ½c. per lb. (p. 63).
Hoofmeal, 25c. per ton (p. 55).
Linseed meal, $2 per ton (p. 63).
Oil, corn, crude, ½c. per lb. (p. 63).
refd., 0.13c. per lb.
Cottonseed, crude, ½c. per lb. (p. 63).
refd., ½c. per lb.
Oiticica, ¼c. per lb. (p. 63).
Tung, imp., ¼c. per lb. (p. 63).
Phenothiazine, NF, 4c. per lb. (p. 49).
Salt, rock, 3c. per lb. (p. 35).
Table, 3c. per lb. (p. 35).
Soybean meal, $1 per ton (p. 63).
Sulfur, refd. grades, 50c. per cwt. (p. 35).
Tin, 1c. per lb. (p. 35).
Salts, ½c. to 6/10c. per lb.
Wax, candelilla, crude, 2c. per lb. (p. 63).
refd., 6c. per lb.
Carnauba, No. 3, refd., pure, 2c. per lb. (p. 63).

Prices Reduced

Aniline oil, 1c. per lb. (p. 46).
Castor beans, $5 per ton (p. 63).
Lithium hydroxide, monohydrate, 2c. per lb. (p. 35).
Oil, citronella, Formosan, 15c. per lb. (p. 56).
Lemongrass, 10c. per lb. (p. 56).
Menhaden, crude, ¾c. per lb. (p. 63).
Oleo, 1c. per lb. (p. 63).
Tung, dom., ½c. per lb. (p. 63).
Oleostearine, ½c. per lb. (p. 63).
Peanut meal, $2 per ton (p. 63).
Platinum metal, $6 per oz. (p. 35).
Shellac, orange grades, 1c. per lb. (p. 60).
Tallow, edible, ½c. per lb. (p. 63).
Wax, bees, crude, African, 1c. per lb. (p. 63).
Brazilian, 1c. per lb.
Chilean, 1c. per lb.
refd., 1c. to 2c. per lb.
Carnauba, No. 1 Ceara, 2c. per lb. (p. 63).
Parnahyba, 2c. per lb.

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

March 8, 1957	March 1, 1957	March 9, 1956
110.97	110.99	106.97

Insecticide Resistance a Problem

Build-up of resistance to insecticides in certain cotton insects, now the No. 1 problem facing cotton entomologists, calls for concerted action by federal, state, and industry groups, a Department of Agriculture scientist said last week. Comment on the limited research effort now underway on this and other cotton-insect problems was made at the Western Cotton Production Conference in Phoenix, Ariz., by K. P. Ewin, head of cotton-insect research for USDA's Agricultural Research Service.

Physiological resistance to insecticides has appeared in a number of destructive cotton insect pests, including the boll weevil, cotton leaf worm, cabbage looper, saltmarsh caterpillar, onion thrips, and certain spider mites. This resistance is only local in many areas, Mr. Ewing said, but there is danger that the problem may become more widespread, particularly in the case of the boll weevil.

Resistance in Ochers

Resistance has also been noted to a lesser degree in such pests as cotton aphids, beet armyworms, southern garden leaf hoppers, cotton leaf perforators, and lygus bugs.

Westward movement of the boll weevil and increased damage by the pink bollworm in western areas also require attention from entomologists, Mr. Ewing added.

Describing modern insecticides as the best weapons now available to prevent

—*Continued on page 67*

Urea Prices to Rise

The Nitrogen Division of Allied Chemical & Dye corporation, New York, has announced an increase in the price of all solid urea products for agriculture. Effective April 1, listings will be increased $5 per net ton of product, on both f.o.b. and freight allowed shipments. All other conditions of sale will remain the same.

Olin Disposes of Rights To Its Chlorine Device

Fischer & Porter Company, instrument and chemical equipment manufacturer, Hatboro, Pa., has acquired from Olin Mathieson Chemical Corporation, New York, all sales, development and manufacturing rights to the HTH tablet hypochlorinator.

The table hypochlorinator was developed by Olin Mathieson in 1951. It is a device for the continuous generation of chlorine solution from calcium hypochlorite tablets.

Cellophane Price Increased 3 Cents a Pound by duPont

E. I. duPont de Nemours & Co., Wilmington, Del., has announced an increase of 3 cents a pound in the price of cellophane, bringing the price of the most widely used types to 62 cents a pound.

J. Edward Dean, director of sales of the company's film department, noted that technological advances in manufacturing have made it possible to hold the rise in cellophane prices, including the present increase, to 53 percent over the low of 1939, while cellophane raw material costs have risen 123 percent and wage rates in cellophane manufacturing have risen 182 percent in the same period.

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ESCAMBIA VICE-PRESIDENT: A. N. Wohlwend, director of commercial development of Escambia Chemical Corporation, New York, who has been named a vice-president of the company.

Grace's Polymer Laboratory Unveiled

W. R. Grace & Co.'s polymer chemicals division last week officially introduced its main offices and laboratories in Clifton, N. J., with a reception for members of the general and trade press. Members of the press toured the offices, application, technical service and research laboratories of the newly-formed polyethylene manufacturing division, and then were feted at luncheon aboard the Santa Paula, Grace Line cruise ship, in New York.

Grace's polymer chemicals division was organized as the seventh chemical division of W. R. Grace & Co. in March, 1956.

The new unit will make high density linear polyethylene, a newer type of polyethylene said to possess greater strength and heat resistance than conventional materials most familiarly known to the public as "squeeze" bottles.

Polymer chemicals division selected Clifton, N. J., as the site for its main offices and customer application and research laboratories because of its location in the heart of the plastics fabricating belt.

T. T. Miller, president of polymer said, "We believe Clifton, N. J., is an excellent location because over 50 percent of the

—Continued on page 70

Solvent Expansion Slated By FMC Chemical Section

A multi-million dollar solvent expansion program is being undertaken at Food Machinery & Chemical Corporation's largest chemical installation, the Westvaco Chlor-Alkali Division plant at South Charleston, W. Virginia. The expansion involves carbon bisulfide and carbon tetrachloride, two major Chlor-Alkali products.

Engineering work on the solvent expansion program has already begun. The present bisulfide unit, built in 1954, will be substantially expanded. The somewhat older carbon tetrachloride unit is to be revamped completely to give more capacity and greater operating efficiency.

The solvent expansion program is part of an overall plan to renovate and enlarge most of Westvaco's South Charleston facilities. Other phases of the program include the entirely new ammonia plant completed in late 1955 and the rebuilding of the chlorine plant now in progress. Modernization of the steam and power facilities, including installation of modern fly ash equipment, is also under way. The complete rehabilitation program is scheduled for completion by early 1958.

Agricultural Chemical Sales, Now Over $250 Million a Year, Will Go Higher: NACA Head

Pesticides industry sales are now running at a level of more than $250 million a year, and there is every likelihood that they will continue to climb. That's the view of Frederick W. Hatch, president of the National Agricultural Chemicals Association. Mr. Hatch, who is manager of agricultural chemical sales for Shell Chemical Corporation, New York, told NACA at its spring meeting in San Francisco last week that the industry can make good this rosy prediction by stepping up sales training at all marketing levels.

Mr. Hatch pointed out that the nation's farmers are caught in a serious cost-price squeeze from which greater use of chemicals can help remove them. In addition, he noted, that there are a number of new promising areas for pest control.

New Areas for Pest Control

He listed forest pests, turf pests, weed control program (particularly along highways) and the control of termites and other household pests. In addition, the NACA head also cited the expanding uses of soil fumigants to destroy nematodes and other soil pests.

Mr. Hatch also reported that the regulations for safe use of pesticides now established by the Food and Drug Administration are working out to the benefit of all concerned.

Agricultural chemicals, he declared, in many cases are the key factors in saving important food crops from total destruction. Through the work of industry and such government agencies as FDA and the Department of Agriculture, he added, "pesticides have been carefully evaluated to determine the extent to which they can be used without hazard.

"This," he asserted, "should silence once and for all the alarmists who have suggested that insecticides used on crops are dangerous to the consumer."

Earl Coke, vice-president of the Bank of America, San Francisco, told NACA that although farm debt has grown while income has declined, "farmers are still in a strong financial position."

Despite the high demand for money from all sources, he reported, adequate funds continue to be available to finance farmers' needs for work-a-day capital and for improvements to make farming more efficient.

Mr. Coke, a former assistant Secretary of Agriculture, commented, "The history of increased borrowings by farmers made necessary by increased costs, the use of vastly more production goods such as machinery, equipment and chemicals, and the enlarging of farms, in itself speaks well for the helpful relationship between lender and borrower."

He said that farm real estate mortgage debt now totals $8,962 million, up $3,383

—Continued on page 65

Alkydol to Take Over New Wrinkle Activities

Alkydol Laboratories, Inc., Cicero, Ill., and New Wrinkle, Inc., Dayton, Ohio, have concluded an agreement by which Alkydol will take over the manufacture and sale of all wrinkle vehicles on behalf of this concern.

Wrinkle vehicles formerly produced by New Wrinkle, and supplied throughout the country, will now be supplied by Alkydol Laboratories. In addition, Alkydol will make available wrinkles in its own line.

Vick Chooses Vice-President

Albert Carroll has joined the Vick Chemical Company, New York, as vice-president of its Merrell-National Overseas Laboratories Division. Mr. Carroll at one time was advertising director of Merck & Co.

Frederick W. Hatch

DuPont Will Have 'Freon' in New Name

A new and more accurately descriptive name—"Freon" products division—will be used after April 1 to identify that unit of E. I. duPont de Nemours & Co. concerned with manufacture and sale of fluorinated hydrocarbon refrigerants, aerosol propellents, solvents and fire extinguishing agents.

The change drops the duPont designation of "Kinetic" chemicals division, under which the "Freon" compounds have been made and sold since mid-1950, when duPont acquired all the assets of the twenty-year-old firm, "Kinetic" Chemicals, Inc.

Officials of the Wilmington, Del., concern pointed out that while the name "Kinetic" was well known to older members of the refrigeration industry it holds little meaning for newer people in that business as well as in the ten-year-old aerosol industry, because it had never been used as a trademark on products.

On the other hand, the trademark "Freon" has been applied to all duPont's fluorinated hydrocarbon compounds since

—Continued on page 65

Cowles Chemical Buys Acreage for Expansion

Cowles Chemical Company, Cleveland, Ohio, has purchased twenty acres of land from River Raisin Paper Company in Monroe, Mich. Cowles said it has no definite plans for starting construction on a new facility on that site, but pointed out that the future expansion of its business required production and distribution facilities in the midwest. It said it hopes to make an announcement concerning a new plant sometime later this year.

Cowles also revealed the acquisition of an additional area of eighty-two acres at Skaneateles Falls, N. Y., for the continued expansion of the company's operations at that location.

Koppers, Brea Defer Building Of Joint Plant

Koppers Company, Pittsburgh, Pa., and Brea Chemicals, Inc., Los Angeles, a subsidiary of Union Oil Company of California, have decided to delay construction on their jointly-owned low-pressure polyethylene plant in Wilmington, Calif.

The installation was expected to have a rated capacity of 30 million pounds of polyethylene a year. Koppers and Brea figured it would cost around $15 million to build.

When originally announced last March (OPD, 3/12/56), it was given a completion date of mid-1957. However, more recently mid-1958 has been mentioned as the scheduled completion date.

Ethylene Plant Also Affected

Postponement of the polyethylene facility also affects a 100-million-pound capacity ethylene plant which Union Oil intended to erect at its refinery in the Los Angeles area. The ethylene unit was planned to feed the Koppers-Brea polyethylene plant with its basic raw material.

The holdup of construction on the west coast was tied in by Koppers president Fred C. Foy with the 30-million-pound polyethylene plant the company is now building at Port Reading, N. J.

Mr. Foy explained that the major factor contributing to the postponement decision was the anticipation that production experience gained at the Port Reading facility would contribute to operating economies and greater efficiency of the west coast operation. Koppers expects its Port Reading installation to go on stream this summer.

In Los Angeles, a Union Oil spokesman was quoted as saying that the delay stemmed from a need to review the economics of the Wilmington polyethylene facility.

No date was given by either Koppers or Brea when construction on the west coast unit might be resumed.

Pittsburgh Coke Planning Plasticizer, Carbon Projects

Pittsburgh Coke & Chemical Company, Pittsburgh, Pa., plans 50 percent expansions in its plasticizer and activated carbon plants this year, according to the firm's annual report for 1956.

Noting that its plasticizer sales were at a satisfactory level last year despite some letdown in demand from suppliers to the automobile industry, the company feels its integrated position in plasticizers warrants the increase in capacity. It has a new $3 million phthalic anhydride plant on stream.

As for the activated carbon project, Pittsburgh Coke points out that its established position in the corn and sugar cane refining processes has broadened. New uses for activated carbon in other processing operations and in the chemical field have been developed.

Mohr With Park & Tilford

Park & Tilford has appointed Jack H. Mohr, formerly president of Lentheric, Inc., to head its toiletries and dyestuffs division. Mr. Mohr entered the toiletries field eleven years ago as assistant to the president of Richard Hudnut. In 1952 he joined the Lentheric division of Olin Mathieson Chemical Corporation as vice-president.

Monomer Unit Planned By Diamond Alkali Co.

Diamond Alkali Company, Cleveland, Ohio, has announced plans for constructing a new plant to produce 50 million pounds of vinyl chloride monomer annually.

The new facility will be located at Diamond's Deer Park plant at Houston, Tex., and is scheduled for completion next year. The plant is part of a major expansion program, which will also include construction of a unit to produce acetylene from natural gas.

Drug Store Prescriptions Up 9 Percent in 1956

The total number of prescriptions dispensed by retail drug establishments in the United States increased by 9 percent in 1956, the Medimetric Institute disclosed last week.

The New York market research agency, which maintains a permanent panel of almost 1,000 reporting drugstores, put the total for 1956 at 629 million, against 577 million in 1955.

Since drug prices rose in 1956, the proportionate increase in dollar volume was somewhat greater, the institute pointed out.

More than half the total increase is accounted for in the tranquilizer and hormone fields. Notable gains were also scored by blood pressure drugs. Most of these today contain Indian snake-root (Rauwolfia serpentina) extracts that likewise have tranquilizing effects, and the institute estimates that about one in every five such prescriptions is written primarily for that purpose.

Other categories showing above-average increases are stimulants (largely containing amphetamine), antihistamines and antibiotics. These six categories preempt more than 80 percent of the total increase.

Contrary to a widely held impression, tranquilizer drugs, while showing phenonmenal gains, were still outranked more than two to one by antibiotics, which account for more than 10 percent of the total in 1956. Systemic analgesics, sedatives and hypnotics, hormones, and vitamins are also well ahead of the tranquilizers.

Tranquilizer drugs, the Medimetric Institute believes, have not yet reached their peak. Present indications are that they will run well ahead of the field in 1957, perhaps reaching a total of more than 40 million prescriptions. The in-

—Continued on page 70

Westvaco HEXAPHOS®

Sodium Hexametaphosphate

with a 5-way Capital S!

Selection . . . only Hexaphos is available in five different forms. The rapidly-soluble, crystal-clear flake form is a Westvaco exclusive!

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BECCO peroxygen chemicals • FAIRFIELD pesticide compounds • FMC organic chemicals • NIAGARA insecticides, fungicides and industrial sulphur • OHIO-APEX plasticizers and resins • WESTVACO alkalis, solvents, phosphates, barium and magnesium chemicals

Association Meetings

Chemical Market Research Association, Sheraton hotel, Philadelphia, March 12-13.

National Industrial Conference Board, fifth conference on atomic energy, Benjamin Franklin hotel, Convention Hall, Philadelphia, March 14-15.

Nuclear Congress, Convention Hall, Philadelphia, March 11-15.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, March 12.

Air Pollution Control Association, annual meeting, St. Louis, Mo., June 2-6.

American Chemical Society, national meeting, Miami, Fla., April 7-12.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Institute of Chemists, annual meeting, Sheraton-Mayflower hotel, Akron, Ohio, May 22-24.

American Pharmaceutical Manufacturers' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 27-29.

American Society of Perfumers, symposium on fragrance, Essex House, New York, March 20.

Association of Consulting Chemists & Chemical Engineers, banquet and symposium, Belmont Plaza hotel, New York, April 24; annual meeting, Belmont-Plaza hotel, New York, October 22.

Chemical Market Research Association, New York, May 27-28; Lake Placid, N. Y., September 16-17.

Chemical Progress Week, April 8-12.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22

Combined Pharmaceutical Contact Committee of American Drug Manufacturers Association and American Pharmaceutical Manufacturers Association, Washington hotel, Washington, D. C., March 26-27.

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28; resort meeting, French Lick, Ind., May 13-14.

Council for Agricultural and Chemurgic Research, annual chemurgic conference, Congress hotel, Chicago, March 26-28.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Electrochemical Society, Statler hotel, Washington, D. C., May 12-16.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Flavoring Extract Manufacturers' Association, annual convention, Roosevelt hotel, New York, May 19-22.

Manufacturing Chemists Association, air and water pollution abatement conference, Shoreham hotel, Washington, D. C., April 4-5; annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6

National Plant Food Council, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13

Parenteral Drug Association, annual midwest meeting, Edgewater Beach hotel, Chicago, April 12.

Society of Flavor Chemists, luncheon and flavor symposium, Roosevelt hotel, New York, May 22.

Society of Plastics Industry, annual conference and Pacific Coast plastics exposition, Shrine Exposition Hall, Los Angeles, March 18-21.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, April 10; annual outing, Skytop Lodge, Skytop, Pa., May 27-29.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 7-9.

Synthetic Fibers Have Future Bright With Prospects of Many New Applications, AIChE Told

A bright future for an expanding range of synthetic fibers to serve a wide variety of new end-uses was forecast last week, by Dr. Frank J. Soday, at the spring meeting of the American Institute of Chemical Engineers in White Sulphur Springs, W. Va. Dr. Soday, who is vice-president and director of the research and development division of Chemstrand Corporation, Decatur, Ala., and president of the Southern Association of Science and Industry, predicted that the annual consumption of synthetic fibers will increase to 1.1 billion pounds by 1965 and to 4 billion pounds by 1975.

Current use of synthetic fibers (not including cellulosic fibers such as rayon) is just under half a billion pounds per year. And this, Dr. Soday pointed out, represents a fifty-fold increase over synthetic fiber consumption just fifteen years ago when the first true synthetic fiber, nylon, was introduced to the textile market.

Nine Major Fibers

Today, Dr. Soday said, there are nine major synthetic fibers made from polymers derived from chemical raw materials. He listed these as the acrylic fibers "Acrilan" and "Orlon," the polyamide fibers "Carprolan," "Nylenka" and nylon; a polyester fiber, "Dacron," and the vinyl fibers "Dynel," "Saran" and "Vinyon."

In addition, he said, new fibers recently announced include the acrylics "Creslan," "Darlan" and "Zefran"; a new nylon known as I.R.C. nylon, and a vinyl fiber, "Verel."

Dr. Soday pointed out that "the manufacture of synthetic fibers is almost wholly a southern industry, and its rapid expansion indicates that it will become one of the most important manufacturing operations in the south.

"Although produced by different companies and by different processes," Dr. Soday said, "most of these new synthetic fibers share certain properties in common. They have good heat insulating properties and are finding widespread application in the apparel field, such as in men's

—*Continued on page 70*

NAPA EXECUTIVE SECRETARY: G. W. Howard Ahl, appointed executive secretary-treasurer of the National Association of Purchasing Agents, succeeding George A. Renard. Francis J. Winters and Miss Rose Brady, named assistant secretary and assistant treasurer, respectively.

Pharmaceutical Sales Seen Leading Growth Rate in Chemical Industry

Sales of pharmaceuticals will continue to lead the chemical industry in growth rate through 1965, Allan J. Greene of Chas. Pfizer & Co., predicts. Mr. Greene, administrative vice-president of the Brooklyn, N. Y., firm, told the annual meeting of the American Institute of Chemical Engineers in White Sulphur Springs, W. Va., that continued emphasis on research, expanding populations and rising standards of living here and abroad justify an optimistic view of the pharmaceutical industry's future over the next decade.

CITED BY WASHINGTON AIC: Dr. Milton Harris, director of research of the Gillette Company, who has been chosen to receive the 1957 honor award of the Washington chapter of the American Institute of Chemists.

No levelling-off period for drugs and biochemicals seems in prospect for the immediate future, Mr. Greene noted. While competition is increasing, new products are keeping the industry as a whole moving forward, he said.

"In fact," Mr. Greene declared, "in the biochemical end of the pharmaceutical business, new products are appearing so fast that for the first time in years there is a slight squeeze on production facilities."

By 1965, Mr. Greene said, pharmaceutical industry sales may approach $4 billion compared with the estimated 1956 total of $2.1 billion, if present trends continue unchanged. During this period, however, more and more emphasis will be placed upon the prevention rather than the cure of disease, Mr. Greene predicted.

"This could bring about radical changes in the entire pharmaceutical industry, but these changes need not be destructive; perhaps quite the opposite," he said. "Preventive medicine would make every individual a potential customer, the healthy as well as the sick."

Paper Group Appoints

The executive committee and board of governors of the American Paper and Pulp Association has appointed Robert E. O'Connor, currently its assistant executive secretary, to succeed E. W. Tinker as executive secretary of the association, upon Mr. Tinker's retirement in October.

AEC Outlines Conditions For Processing Chemicals

Conditions under which the Atomic Energy Commission is prepared to contract with operators of private nuclear reactors for the chemicals processing, by the commission, of spent fuel elements taken from the reactors were detailed in a notice published in *Federal Register*, March 9.

It had been announced earlier by the commission that until commercial facilities have been set up to do the work, it would contract at a price to be negotiated with individual contractors, to recover the source and special nuclear material contained in irradiated fuel elements or blanket materials removed from the privately-operated reactors.

The principle features of these contracts as now announced by the commission are:

• Contracts with private reactor operators extending through June 30, 1967,

—*Continued on page 67*

DuPont Business Hits Its Second Highest Peak

Sales, earnings, and dividends of E. I. du Pont de Nemours & Co., Wilmington, Del., in 1956 were the second highest in the company's history, exceeded only by the record highs established in 1955, Crawford H. Greenewalt, president, has disclosed in his annual report to the more than 168,000 stockholders.

Sales were $1.888 million, or 1 percent lower than in 1955, while physical volume of sales was about 3 percent higher. For the fourth quarter of 1956, sales were at an all-time high of $495 million.

Air, Water Pollution Topics for MCA Parley

Numerous phases of air and water pollution problems will be discussed by experts in various fields at the April 4-5 pollution abatement conference of the Manufacturing Chemists' Association in the Shoreham hotel, Washington, D. C.

The meeting will start off with an air pollution control session during the morning of April 4. The following papers will be presented:

"Full Scale Dispersion Determination in the Vicinity of a Chemical Plant," by George Collins, of E. I. duPont de Nemours & Co.

"High Temperature Gas and Aerosol Removal With Fibrous Filters," by Dr. Leslie Silverman, assistant professor of industrial hygiene engineering at the School of Public Health, Harvard University.

"Critical Evaluation of Statutory Approaches," by Frank L. Seamans, of Smith, Buchanan, Ingersoll, Rodewald & Eckert.

"The Challenge of Air Pollution Control," by Harry C. Ballman, executive secretary of the Air Pollution Control Association.

The water pollution control session in the afternoon will hear the following papers:

"Assimilation of BOD in Natural Waters," by E. C. Hubbard and W. E. Knight, of the North Carolina Stream Sanitation Committee.

"Technics for the Biochemical Oxidation of Complex Organic Mixtures," by Vernon T. Stack, Carbide & Carbon Chemicals Company,

—*Continued on page 37*

SOCMA to Hear Editor

Dr. Heinz E. Luedicke, editor of the *Journal of Commerce*, will speak at the March 12 meeting of the Snythetic Organic Chemical Manufacturers Association in the Roosevelt hotel, New York. His topic will be "The Changing Business Picture." Cocktails will be served at noon and luncheon a half hour later.

ACS Is Planning Big Spring Meeting

The American Chemical Society, at its 131st national meeting in Miami, Fla., next month will hear 1,358 reports on the whole broad range of chemistry. The meeting, scheduled for April 7 through 12, will be the largest spring session in the eighty-one-year history of the society and will be attended by representatives of 150 local sections.

A new class of pain-relieving drugs, chemical contributions to the citrus fruit industry, and improvements in paints, plastics and other chemical products will be

—*Continued on page 58*

Paper From Synthetics Seen Closer to Reality

E. I. duPont de Nemours & Co. and some of the nation's leading paper manufacturers feel that commercial production of paper from synthetic fibers is closer than many people think.

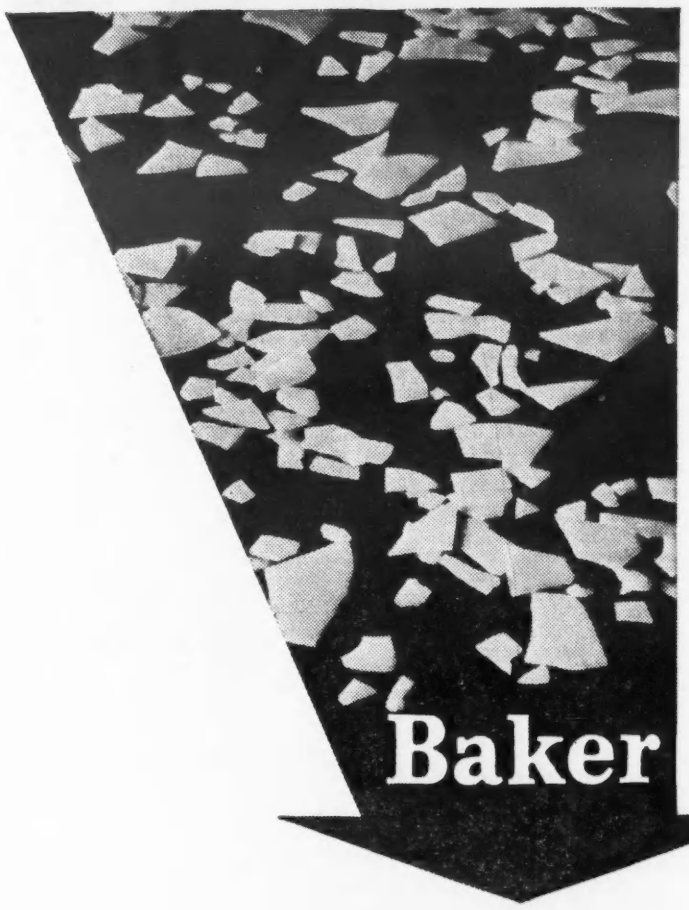
The Wilmington, Del., chemicals producer says this speed-up in availability is being made possible by the solution of many technological problems sooner than anticipated. Commercial output is "foreseen within a year," according to the duPont timetable.

Recent developments resulting from duPont research, for example, have been specially treated papermaker fibers of nylon, "Dacron" polyester fiber, and Orlon" acrylic fiber, and the development of special cutting technics which permit cutting these fibers to short lengths without fiber fusion or presence of long fibers. Because of these developments, papermaking fibers are now being made available to the paper industry in semi-commercial quantities.

Fibers can be obtained in one-quarter and one-eighth inch lengths with a diameter of 0.7 mils (three denier). A broader range of fiber lengths and deniers will be available in the near future.

With the cooperation of leading paper

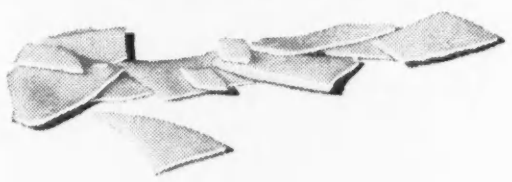
—*Continued on page 38*



Here's news!

Baker CALCIUM NITRATE, Tech.
ZINC NITRATE, Tech.

in THIN FLAT FLAKES



- *Faster dissolving*
- *Uniform purity—lot after lot*
- *Controlled water of hydration*
- *Easier to handle*

Look over the photograph above, reproduced to actual size. Note the thin flakes with large surface area. THIN FLAKES go into solution FAST – you save time and money. They are easy to handle. These chemicals in *flake* form represent another Baker first.

Latex processors gain better control of coagulation because of the controlled high assay and known water of hydration. This uniform purity, controlled pH and freedom from extraneous matter insure better quality in your finished goods with fewer rejects.

These chemicals are produced to meet precise specifications. In the informative typical analysis shown below, note the very low ammonium nitrate content in Baker Calcium Nitrate. The exceptionally low copper and manganese contribute to longer life for your latex products, with less tendency to oxidize and become brittle or too soft.

These features of Baker Calcium Nitrate and Zinc Nitrate also are helpful to manufacturers of rustproofing specialties, textile finishes, pigments, adhesives and lithographic materials.

Because of the low melting points and deliquescent nature of these chemicals, they are packaged with polyethylene liners and are stored in an air conditioned warehouse at a temperature below 85°F.

Write for samples and prices for these new *flaked* products, Calcium and Zinc Nitrate Technical.

CALCIUM NITRATE, Technical Flake — *Typical analysis*

Assay (as $Ca(NO_3)_2$)	70.8 %
Water of Hydration	28.6 %
Insoluble and NH_4OH Ppt.	0.03 %
Ammonium Nitrate (NH_4NO_3)	0.1 %
Magnesium & Alkalies (as NO_3)	0.4 %
Iron (Fe)	0.0003%
Copper (Cu)	0.0004%
Manganese (Mn)	0.001 %
pH of 5% Solution	6.0

Thin (0.025 in.) flakes about ½ inch in size with the following typical mesh analysis:

On U.S. No. 4	45%
Thru U.S. No. 20	8%

ZINC NITRATE, Technical Flake — *Typical analysis*

Assay (as $Zn(NO_3)_2$)	74.2 %
Water of Hydration	25.6 %
Insoluble Matter	0.008 %
Iron (Fe)	0.001 %
Lead (Pb)	0.005 %
pH of 5% Solution	5.1

Thin (0.035 in.) flakes about ½ inch in size with the following typical mesh analysis:

On U.S. No. 4	26%
Thru U.S. No. 20	9%

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, March 8 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).
Acenaphthene, below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C., m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
l.c.l., works lb. .13½ -
tanks, works lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech, flaked, bbls., bgs., c.l., frt. alld lb. .30½ - —
ton lots lb. .31½ - —
smaller lots lb. .34½ - —
USP, bbls., 2,000-lb. lots lb. .79 - —
smaller lots lb. .80 - .81
Acetic anhydride, aluminum ret., dms., c.l., dlvd. E lb. .15½ - —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
l.c.l., dlvd lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .62 - —
l.c.l., dlvd lb. .63 - —
Acetone, CP dms., c.l., dlvd. lb. .10½ -
l.c.l., dlvd lb. .11½ -
tanks, dlvd lb. .08 - —
Methyl (see M).
Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.22 - 1.24
Acetophenone, cns., dms lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks frt. alld. E. of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l. frt alld E. of Denver. lb. .40 - —
tanks, frt. alld. E. of Denver. lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —
Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490 -
cryst., dms. c.l., works lb. .06½ - —
l.c.l., works lb. .07 - .07½
Acetic, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 8.25 - —
70% bbls 100 lbs. 9.95 - —
80% bbls 100 lbs. 10.45 - —
glacial, syn., CP, dms., dlvd. 00 lbs. 22.00 -23.00
tech, dms., c.l., dlvd 100 lbs. 13.75 - —
l.c.l., dlvd. 100 lbs. 14.25 - —
tanks, dlvd 100 lbs. 10.00 - —
USP chys., inclusive, dlvd., 100 lbs. 31.00 -32.00
Acetic anhydride (see Acetic anhydride above).
Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb lots, point of shipt lb. .63 - —
standard, fine, cryst., gran., (30-40 mesh) powd. (80 mesh) bbls 1,000-lb lots, same basis lb. .58 - .60
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich. Chicago and St. Louis.
Adipic, bgs., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .34¾ - —
Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75
p-Aminobenzoic, tech., dry, dms., works lb. 1.74 - 1.77
USP dms. 1,000-lb lots or more, works lb. 2.60 - —
smaller lots, works lb. 2.65 - 2.75
p-Aminosalicylic, dms. 100 lbs or more, frt adjusted lb 3.70 - —
Anthranilic, 99%, 150-lb. dms., dlvd lb. 1.13 - —
Arsenous, tech (see Arsenic, white).
USP (see Arsenic trioxide)
Ascorbic USP dms., 25-100 kilo lots kilo. 12.00 - —
10-kilo lots kilo. 12.35 - —
5-kilo lots kilo. 12.75 - —
bots 1-kilo lots kilo. 13.00 - —
500-gram lots kilo. 13.50 - —
Battery, chys., c.l., works, E, 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45
Benzoic, tech., bbls., dms., 100-lb lots or more lb. .44 - —
USP, bbls., dms., 100-lb. lots or more lb. .54 - —
Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).
Betaoxynaphthoic (see Acid b-Oxynaphthoic).
Boric, tech., 99.9%, cryst., bgs., c.l., works ton. 129.00 - —
ton lots, ex whse., N. Y. or Chi ton. 184.25 - —
smaller lots, same basis, ton. 189.25 - —
dms., c.l., works ton. 153.50 -173.50
ton lots, ex whse., N. Y. or Chi ton. 208.75 -228.75
smaller lots, same basis, ton. 213.75 -233.75
gran., bgs., c.l., works ton. 104.00 - —
ton lots, ex whse., N. Y. or Chi ton. 159.25 - —
smaller lots, same basis, ton. 164.25 - —
dms., c.l., works ton. 128.50 -148.50
ton lots, ex whse., N. Y. or Chi ton. 183.75 -203.75
smaller lots, same basis, ton. 188.75 -208.75
bulk, c.l., works ton. 98.00 - —
Boric, tech., 99.9% powd., bgs., c.l., works ton. 109.00 - —
ton lots, ex whse., N. Y. or Chi ton. 159.25 - —
smaller lots, same basis, ton. 164.25 - —
dms., c.l., works ton. 133.50 -153.50
ton lots, ex whse., N. Y. or Chi ton. 188.75 -208.75
smaller lots, same basis, ton. 193.75 -213.75
USP boric acid $25 per ton higher.
Broenners, bbls lb. 1.76 - —
Butyric, 99%, dms., c.l., frt. equald. lb. .34 - —
l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Capric, dms lb 25 .27
Caprylic, dms lb 25 .27
Cassella, dms., frt alld., 100% basis lb 1.44 1.75
Castor oil, dms lb. .17¾ - .19¾
Chicago paste bbls, frt. alld lb 3.21 —
Chloroacetic, mono, purif., flake, 99%, c.l., dms. lb. .23½ - —
l.c.l., dms lb. .24½ - —
tech., flake, 98%, c.l., dms., frt. equald lb. .19 - —
l.c.l., dms, frt. equald. lb. .20 - —
o-Chlorobenzoic, fib dms., t.l., works lb 1.10 - —
smaller lots, works lb. 1.25 - —
Chlorosulfonic, dms., c.l., frt. equald lb. .0465 - —
l.c.l., frt. equald lb. .0515 - —
tanks, frt equald lb. .0415 - —
Acid, chlorosulfonic, in stainless steel dms. ½c per lb higher.
Chromic, 99¾% dms., c.l., works, frt. equald lb. .29½ - —
l.c.l., dlvd. N. Y., Metropolitan area lb. .30 - .31
NF (see Chromium trioxide).
Cinnamic, refd., bots lb 2.50 3.50
Citric, USP, anhyd., gran., fine gran., bgs., dms., c.l. lb. .29½ - .30
10,000-lb lots, 1 shipt. lb. .30 - .30½
smaller lots lb. .30½ - .31
hydrous, gran., fine gran., bgs., dms., c.l lb. .27½ - .28
10,000-lb lots, 1 shipt. lb. .28 - .28½
smaller lots lb. .29 - .29½
Powdered citric acid ½c higher
Cleve's, mixed, bbls lb. 1.05 - —
Coconut oil, dist., dms. lb. .23½ - .25½
tanks lb. .21½ - —
dbl. dist., dms lb. .24½ - .26½
tanks lb. .22½ - —
Corn oil, dist. dms lb. .16¾ - .18¾
tanks lb. .14¾ - —
Cottonseed oil, dist., dms lb. .15¾ - .17¾
tanks lb. .13¾ - —
2,3-Cresotic, dms., ton lots, works, lb. .70 - —
smaller lots, works lb. .72 - —
Cresylic, coaltar, dom., resin and tricresyl phosphate grade, 50%, 207° or above, tanks, frt, equald. gal. 1.10 - —
204° to 207° C., tricresyl phosphate grade, tanks, frt. equald gal. 1.10 - —
204° to 207° C., resin grade, tanks, frt. equald gal. 1.20 - —
non-resin grade, 50%, 210° or above, total range over 9° C., dms., c.l., frt, equald. gal. 1.15 - —
l.c.l., frt equald gal. 1.19 - 1.20
tanks, frt. equal l gal. 1.00 - —
Imp. 75% at 215° C. or over, dms., ex whse gal. .95 - —
petroleum, dom., 195° to 214°C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
l.c.l. same basis gal. .82 - .84
tanks, same basis gal. .65 - —
200° C to 222° C., tanks, Wilmington, Cal lb. .65 - .72
211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 - —
l.c.l. same basis gal. .78 - .80
tanks, same basis gal. .61 - —
220° C to 242° C., tanks, Wilmington, Cal lb. .62 - .67
245° C. to 295° C., tanks, Wilmington, Cal gal. .50 - —
Crotonic, fib dms., 200 lbs. or more, works lb. .50 - —
Cyanoacetic, tech. bbls. lb .90 - 1.25
Dichlorophenoxyacetic (see 2,4-D).
Diethylbarbituric (see Barbital).
Diglycolic, bgs. works lb. .14 - —
Dithiodibenzoic, dms., 1,000-lb. lots, works lb. 1.45 - —
2-Ethyl hexoic, dms., c.l., dlvd. lb. .37 - —
l.c.l. dlvd lb. .38 - —
tanks, dlvd lb. .34½ - —
F, crude, paste, bbls., works lb. 2.10 - —
Folic, bots., fib. cns., kilo-lots or more gram. 1.40 - —
Formic, 85%, chys., c.l., works lb. .1570 -
l.c.l., works lb. .1620 - .1720
90%, chys., c.l., works lb. .1625 -
l.c.l., works lb. .1675 - .1775
Fumaric, tech. bgs., dms., c.l., frt. alld. E lb. .27 - —
l.c.l., same basis lb. .28 - —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Gallic NF VII, bbls. 1,000-lb. lots lb. 2.00 - —
smaller lots lb. 2.02 - 2.22
tech., bbls., 1,000-lb. lots lb. 1.78 —
smaller lots lb. 1.80 - 2.00
Gamma, dry, grd. bbls., frt. alld. lb. 1.50 —
paste, bbls., frt alld lb 1.45 —
Gluconic, tech., 50%, bots., works, lb. .25 - 1.16
non-ret. dms., c.l., works. lb. .15½ -
1-dm. lots, works lb .16 - —
l-Glutamic, 99½% fib. dms., 100-lb. lots, frt. alld lb. 2.00 - —
25-lb. lots, frt. alld lb. 2.05 - —
Glycolic (see Acid hydroxyacetic).
H, dry, bbls., c.l., frt. alld., 100% basis lb. 1.00 - —
l.c.l., same basis lb. 1.02 - —
Hydriodic, 1.50 s.g., chys. lb. 2.94 - —
1.70 s.g., chys lb. 3.23 - —
Hydrobromic, medicinal, 48%, chys., dlvd. E lb. .37 - .43
Hydrochloric, anhyd (see Hydrogen chloride).
18° chys., c.l., works 100 lbs. 2.50 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 2.90 - 3.05
tanks, works, frt. equald ton. 28.00 - —
20° chys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.15 - —
tanks, works, frt. equald ton. 30.00 - —
22°, chys., c.l., works 100 lbs. 3.25 - —
l.c.l., dlvd., Metropolitan area 100 lbs. 3.65 - —
tanks, works, frt. equald ton. 35.00 - —
CP, USP, consumers, chys., extra, c.l., works lb. .15¾ - —
l.c.l., same basis lb. .17¼ - .17¾
5-pint bots, extra, cs., c.l., same basis lb .20¾ - —
l.c.l. same basis lb. .22¼ - .23¼
Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb. less.
Hydrocyanic, cyls, c.l. dlvd lb. .70 - —
l.c.l., same basis lb. .75 - .90
dilute NF, 2%, 5-lb. bots lb. .40 - —
Hydrofluoric, anhyd. (see Hydrogen fluoride).
aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs. 19.25 - —
l.c.l., t.t.l., dlvd 100 lbs. 20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
l.c.l., t.t.l., dlvd 100 lbs. 22.50 - —
tanks, works, frt. equald. 100 lbs. 15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic, dms. works, 30% basis lb. .06 - —
Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W Va., 100% basis lb. .095 - —
Hypophosphorous, purif., 50%, chys lb. 1.30 - 1.32
USP, chys. lb. .88 - —
Isonicotinic, 100-lb fib. dms., works lb. 4.25 - —
Hydrazide (see Isoniazid).
Itaconic, tech., fib. dms., c.l., works lb. .44 - —
l.c.l., works lb. .45 - —
purif., fib. dms., c.l., works lb. .54 - —
l.c.l., works lb. .55 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
		dms.	drums	nom.	nominal
anhyd.	anhydrous	dom.	domestic	o-	ortho
a.p.a.	available phosphoric acid	E.	east	ord.	ordinary
		e.p.	end point	oz.	ounce
approx.	approximately	equald.	equalized	p-	para
artif.	artificial	exp.	expressed	Pac.	Pacific
ASTM	American Society for Testing Materials	F	fahrenheit	pf	proof
		ferment.	fermentation	phos.	phosphate
		f.f.a.	free fatty acid	photo.	photographic
Atl.	Atlantic	f.f.c.	free from chlorine	pkgs.	packages
Be.	Baume			powd.	powdered
bbls.	barrels	fib.	fiber	precip.	precipitated
bgs.	bags	f.o.b.	free on board	prod.	producer
bls.	bales	f.p.a.	free of prussic acid	pt.	point
bots.	bottles			pulv.	pulverized
b.p.	boiling point	frt.	freight	purif.	purified
b.p.l.	bone phosphate of lime	gal.	gallon	redist.	redistilled
		gran.	granular	refd.	refined
b.r.	boiling range	grd.	ground	refy.	refinery
bxs.	boxes	i.&a.	iron and aluminum	reg.	regular
C.	centigrade			resub.	resublimed
chys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured			SD	specially denatured
		imp.	imported		
c.i.f.	cost insurance, freight	incl.	included	s.d.	single distilled
		indust.	industrial	S. E.	southeast
cks.	casks	kgs.	kegs	sec.	secondary
c.l.	carlots	l-	laevo	secs.	seconds
cns.	cans	lacq.	lacquer	s.g.	specific gravity
coml.	commercial	lb.	pound	ship't	shipment
conc.	concentrated	l.c.l.	less than carlots	soln.	solution
CP	chemically pure	l.t.l.	less truckload	s.u.	standard unit
		liq.	liquid	syn.	synthetic
cps.	centipoises	mfrs.	manufacturers	tanks.	railroad tankcars
cryst.	crystal	m-	meta	tech.	technical
cs.	cases	m.a.p.	mixed aniline point	tert-	tertiary
ctns.	cartons			t.l.	truck loads
cyls.	cylinders	min.	minimum	t.w.	tank wagons
d-	dextro	m.p.	melting point	USP	U S Pharmacopoeia
dbl.	double	N-	nitrogen	vis.	viscosity
denat.	denatured	n-	normal	VM&P	varnish makers & painters
dest-dist	destructive-distilled	nat.	natural		
		neut.	neutral	W.	west
dl-	dextro-laevo	NF	National Formulary	whse.	warehouse
dist.	distilled			w w	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid J—Alcohol, n-Butyl

Acid, J, paste, bbls., works, 100% basis lb. 2.45 - —
powd., bbls., sam basis lb 2.50 - 2.85
Koch, bbls., frt. alld., 100% basis. lb. 1.00 - —
L, bbls, works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1821- .215
smaller lots lb. .1921- .225
80%, bbls., 5 or more lb. .3121- .37
smaller lots lb. .3171- .375
plastic grade 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22% bbls., c.l., works 100 lbs 6.30 - —
t.c.l., works 100 lbs 6.70 - —
cbys., t.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 - 11.95
t.c.l., works 100 lbs. 11.85 - 12.35
USP, 85%, cbys. lb. .85 .88
Laurent's, bbls lb .60 —
Lauric, 90% dms lb. .36½- .38½
Linseed oil, dist., dms lb. .1960- —
w.w., dms lb. .2260- —
Maleic, cryst, powd, dms lb. .37 .38
Malic, tech., dms lb. .50 —
Mandelic, NF dms., 1,000-lb. lots. lb 2.35 - —
smaller lots lb 2.40 2.50
Metanilic, dms., works lb. .57 .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .47 - —
smaller lots, works lb. .47½- .80
tanks, works lb. 45 - —

Acid, molybdic, 85%, dms., works lb. 1.20 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb. .26 - .28
1-naphthol-4 sulfonic (see Acid, Neville and Winthers)
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic 2-amino (see Acid, J).
Naphthol sulfonic mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's)
2,Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid Tobias).
Nevile and Winther's, dms., frt. alld lb. 1.30 - —
Nicotinic, USP, dms., dlvd kilo 8.00 - 8.30
Amide, USP (see Nicotinamide).
Nitric, 36° Be, cbys., c.l., works, E 100 lbs. 5.75 - —
t.c.l., works, E 100 lbs. 6.05 - 6.85
38° Be, cbys., c.l., works, E 100 lbs. 6.25 - —
t.c.l., works, E 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E 100 lbs. 6.75 - —
t.c.l., works, E 100 lbs. 7.05 - 7.85

Acid, nitric, 42° Be, cbys., c.l., works, E 100 lbs. 7.25 - —
t.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
t.c.l., same basis lb. .20 - .20½
5-pt. bots., extra, cs., c.l., same basis lb. .22½- —
t.c.l., same basis lb. .24 - .25
p-Nitrobenzoic, dms., c.l., works. lb. .72 - —
t.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .17¾- .19¾
tanks lb. .15¾- —
dbl. dist. (white), dms lb. .19¾- .21¾
tanks lb. .17¾- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls, c.l., works lb. .16½- —
10,000-lb lots, works lb. .16¾- —
smaller lots, works lb. .17¾- —
p-Oxynaphthoic, fib dms, 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Palm, dist., dms lb. .14¾- .16¾
tanks lb. .12¾- —
Para aminobenzoic (see Acid, p-Aminobenzoic).
Para aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid p-Chlorobenzoic).
Paramethylphenylcinchonic see Neocinchophen).
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid p-toluidine-m-sulfonic).
Peri, dry, frt. alld. lb. 1.35 - —
paste, frt. alld. lb. 1.30 - —
Phenylacetic, pure, cryst., cns. lb. 1.45 - 1.75
Phenylcinchoninic (see Cinchophen).

Acid, phenylglycolic (see Mandelic).
Phosphoric, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 6.75 - —
t.c.l., same basis 100 lbs. 7.00 - 7.50
tanks, works 100 lbs. 5.35 - —
80%, cbys, c.l., frt. alld. 100 lbs. 7.60 - —
t.c.l., works 100 lbs. 7.85 - 9.10
tanks, works 100 lbs. 5.75 - —
NF, 85%, cbys., c.l., works lb. .0825- —
t.c.l., works lb. .0850- .0875
tanks works lb .0640- —
Picric, NF, bbls lb. .85 - —
tech., bbls lb. .44 - —
Propionic, syn. pure, dms., c.l., works lb. .22¾- —
t.c.l., works lb. .23¾- —
tanks, works lb. .20¾- —
Pyrogallic, NF (see Pyrogallol)
tech., bbls lb. 3.17 - 3.25
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb 3.25 - —
Salicylic, crude fib. dms. c.l., frt. alld lb. .35 - —
t.c.l., frt. alld. on 100 lbs. or more lb. .36 - —
sublimed tech. fib dms., c.l., dlvd lb. .37 - —
t.c.l., dlvd lb. .41 - —
USP, cryst., fib. dms lb. .50 - —
powd., fib. dms lb. .57 - —
Sebacic, purif., dms. c.l. works lb. .64 - —
t.c.l., works lb. .66 - .70
Soybean oil, dbl. dist., dms lb. .18¾- .20¾
tanks lb. .16¼- —
s.d., dms lb. .17¼- .19¼
tanks lb. .15¼- —
Stearic, dbl pressed, bgs lb. .15¼- .17¼
single pressed, bgs lb. .14¾- .16¾
triple pressed, bgs lb. .17½- .19¼
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech. dms. c.l., frt. alld lb. .21 - —
t.c.l. frt. alld lb. .23 - —
Sulfuric, 60° Be, cbys., c.l., works. 100 lbs. 2.00 - —
t.c.l. works 100 lbs 2.45 - —
tanks, works ton. 18 60 - —
66° Be, cbys., c.l., works. 100lbs. 2.25 - —
t.c.l. works 100 lbs. 2.55 - 3.35
tanks, works ton. 22.35 - —
93%, tanks, works ton. 23.50 - —
99-100%, tanks, works ton. 23.95 - —
CP, NF, consumers frt. equald. lb. .12¾- —
t.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra cs., cl., works, frt. alld lb. .16¼- —
t.c.l., same basis lb. .18¼- .18¾
fuming (oleum), 20%, tanks, works ton. 25.00 - —
40%, tanks, works ton. 29.00 - —
65%, tanks, works ton. 39.50 - —
Tall oil, dms., c.l., works lb. .09 - .09½
tanks, works lb. .07½- .08
Tallow dist., dms lb. .13¼- .17¼
tanks lb. .13¼- —
hydrogenated, dms lb. .14¼- .16¼
Tannic, NF duffy bbls., 1,000-lb. lots lb. 2.05 - —
smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots lb. 1.95 - —
smaller lots lb. 1.96 - 2.01
tech., dms lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l lb. .49 - —
10,000-lb. lots, 1 shipt lb. .49½- —
smaller lots lb. .50 - —
100-lb. dms lb. .51 - —
imported, bgs lb. .42 - .45
Thioglycolic, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
p-Toluenesulfonic, dms., c.l., t.l., works lb. .17 - —
t.c.l., works lb. .18 - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l lb. .90 - —
125 lbs to t.l lb. 1.00 - —
o-Toluidine-m-Sulfonic, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic, bbls., works lb .92 - 1.04
Trichloroacetic, bots. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
smaller lots, works lb. 3.15 - 3.50
Undecylenic, dms lb. 1.40 - —
Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
t.c.l., works lb. .47½- —
tanks works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
t.c.l., t.t.l., frt. equald lb. .31 - —
tanks, frt. equald lb. .27 - —
ACTH, cryst. bulk 1,000 units/gram, bots gram 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls. lb. 2.00 - 2.20
powdered, 30 mesh, fib., dms lb. 2.50 - —
dl-Alanine, dms., works lb 8.50 - 11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms lb. .65 - .85
Egg, edible, cryst., powd., bbls. lb. 1.49 - 1.51
flake lb. 1.45 - 1.47
tech., cryst., bbls lb. 1.03 - 1.10
Alcohol, allyl, dms., c.l., dlvd lb. .32½- —
t.c.l., dlvd lb. .33½- —
tanks, dlvd lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms. t.c.l., dlvd lb. .43 - —
ACS grade, dms., t.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18½- —
t.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
t.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
t.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld, E lb. .18½- —
t.c.l., frt. alld E lb. .19½- —
tanks, frt. alld E lb. .16 - —
1-pentanol, (syn normal), dms., c.l., works lb. .41½- —
t.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
t.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Benzyl, NF, dms lb. .64 - .79
tech., dms., dlvd lb. .47½- .49
n-Butyl, ferment, dms., c.l., frt. alld lb. .16½- —
t.c.l. frt. alld lb. .17½- —
tanks, frt. alld lb. .14 - —
syn., dms., c.l., dlvd lb. .16½- —
t.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
sec-synthetic, dms., c.l., dlvd. lb. .14½- —
t.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .12 - —

General Chemical Expands

Nitric Acid Production

HNO_3

...Additional Capacity Now On Stream At Newell, Pa.

To supply growing demands for nitric acid by industrial and military users, General Chemical has made a major increase in the capacity of its large Newell, Pa., facilities.

These—together with the output of two other strategic plants—form the pipe line through which General provides the largest selection of grades and strengths of nitric acid on the market.

For over 50 years, General has been a leading producer of this basic chemical in all its forms . . . for every type of application. It pioneered the special fuming nitrics so important to the rocket program, and has a knowledge of the product and its properties invaluable to every user.

Whatever your nitric requirements may be—in metals or metallurgy, in engraving or explosives, in rockets or research—make General your source of supply. For carboys, carloads, tank cars and tank trucks, just call the nearest General Chemical office listed below.

AVAILABLE GRADES OF NITRIC ACID INCLUDE:

Standard & Diamond
36°, 38°, 40°, 42° Baume; 95-98%

Photo Engravers
36°, 38°, 40°, 42° Baume

Reagent, A. C. S.
Sp. Gr. 1.42

Red Fuming
Technical, Various Strengths of NO_2 content
Reagent, Sp. Gr. 1.59-1.60

White Fuming
Technical, 97.5% HNO_3
Reagent, A. C. S., Sp. Gr. 1.49-1.50

Mixed Acids and other Specialized Formulations

Basic Chemicals for American Industry

GC

Allied Chemical

GENERAL CHEMICAL DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

Offices: Albany • Atlanta • Baltimore • Birmingham • Boston • Bridgeport • Buffalo • Charlotte • Chicago • Cleveland • Denver • Detroit • Greenville (Miss.) • Houston • Jacksonville • Kalamazoo • Los Angeles • Milwaukee • Minneapolis • New York • Philadelphia • Pittsburgh • Providence • San Francisco • Seattle • St. Louis • Yakima (Wash.) **In Canada: The Nichols Chemical Company, Limited • Montreal • Toronto • Vancouver**

Alcohol, n-butyl, tert-synthetic, dms., l.c.l., frt. alld lb. .15 - —
c.l., frt. alld lb. .14 - —
tanks, frt. alld. lb. .12 - —
Capryl, 85%, dms., c.l. and t.l. works lb. .19 - —
l.t.l., same basis lb. .19½- —
tanks, frt. equald lb. .16½- —
sec., 92-99%, dms., c.l. lb. .22 — —
l.c.l. lb. .23 — —
tanks lb. .19½- —
Cetyl, extra, fib. cns. 500-lb. lots or more lb. .63 .72
NF, fib. cns., 140-lb lots or more lb. .48 —
Cinnamic, bots lb 2.15 2.75
Decyl mixed isomers, dms., c.l., dlvd lb. .23½- —
l.c.l. dlvd lb .24½- —
tanks, dlvd lb .21 — —
perfume grade, bots lb 1.75 2.00
normal (see 1-Decanol)
Denat. CD-12, CD-13 CD-14 CD-17, dms. c.l. dlvd E of Rockies gal. .64½- .66
l.c.l., same basis gal. .69½- .77
tanks, dlvd same basis gal .63½ .69
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div
Proprietary solvent, dms. c.l., dlvd. E of Rockies gal. .68 — —
l.c.l. same basis gal. .71 - .77
tanks, same basis gal .50 — —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Div
SD1, dms., dlvd. E. of Rockies, gal. .63½- —
l.c.l., same basis.. ...gal. .70½- .76½
tanks, same basis .....gal. .49½- —
SD2B, dms., c.l., dlvd. E of Rockies gal. .64 - —
l.c.l., same basis ... . gal. .69 - .75
tanks, same basis ..... gal. .48 - —
SD3A, dms. c.l. dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis gal. .68 - .74
tanks, same basis .....gal. .47 - —
SD23A dms c.l dlvd E of Rockies gal .655 —
l.c.l., same basis gal. 705 .765
tanks, same basis gal. 495 —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
l.c.l., same basis gal. 71 - .77
tanks, same basis gal. .50 - —
SD29, dms. c.l. dlvd E. of Rockies gal .645 - —
l.c.l. same basis gal .695 - .755
tanks, same basis gal 485 —
SD30, dms. c.l. dlvd E of Rockies gal .63 - —
l.c.l. same basis gal. 68 - .74
tanks, same basis gal. 47 —
SD35A dms c.l dlvd E of Rockies gal. .66 - —
l.c.l., same basis .....gal. .71 - .77
tanks, same basis .....gal. .50 - —
For anhydrous alcohol, on above formulas, prices are 7c. per gallon higher.
SD40, dms., c.l., dlvd. E. of Rockies gal. .64 - —
l.c.l., same basis ..... gal. .69 - .75
tanks, same basis .....gal. .48 - —
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington where a 5c differential on tankcars is maintained
Diacetone, acetone-free, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd lb. .125 - —
tech., dms. c.l. dlvd lb. 145 - —
l.c.l. dlvd lb 1.55 — —
tanks, dlvd lb .12 - —
Ethyl, 190 pf., USP tax paid, dms., c.l., dlvd. E. of Rockies gal.20.58 - —
l.c.l. same basis gal.20.63 -20.69
tanks same basis gal.20.42 —
tax free, dms. c.l., dlvd. E of Rockies gal. .63 - —
l.c.l. same basis gal. .68 - .74
tanks, same basis gal. .47 - —
absolute, 200 pf tax paid, dms., dlvd, E. of Rockies gal.21.70 - —
l.c.l., same basis....gal.21.75 -21.81
tanks, same basis....gal.21.54 - —
2-Ethylbutyl, dms. c.l. works lb .30 — —
l.c.l. works lb. .30¾- —
tanks, works lb. .28 - —
2-Ethylhexyl, dms., c.l. dlvd. E. lb. .24¼- —
l.c.l. same basis lb. .25¼- —
tanks, same basis lb. .21¾- —
Furfuryl cns. works lb. .29 — —
dms., c.l. Memphis, Tenn. lb. .20 - —
Newark N J lb. .21½- —
l.c.l., Memphis Tenn lb .21 - —
Newark N J lb .22½- —
tanks Memphis Tenn lb .184 —
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd lb. .29¼- —
l.c.l. dlvd lb. .29¾- .30¼
tanks, dlvd lb. .27¼- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.
Isoamyl, dms. c.l. works, frt. alld. E lb. .28 - —
l.c.l. same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isobutyl, dms., c.l. dlvd..... lb. .15½- —
l.c.l. dlvd ..... lb. .16½- —
tanks, dlvd ..... lb. .13 - —
Iso-octyl, dms., c.l., dlvd. E lb. .23¼- —
l.c.l. dlvd E lb. .24½- —
tanks, dlvd E lb. .21 - —
Isopropyl, refd 91%, dms., c.l., dlvd gal. .53 - —
l.c.l. dlvd gal. .60 - —
tanks, dlvd ..... gal. .37 - —
95%, c.l. dlvd ..... gal. .55 - —
l.c.l. dlvd ..... gal. .62 - —
tanks, dlvd ..... gal. .39 - —
99%, dms., c.l., dlvd..... gal. .57 - —
l.c.l. dlvd. ..... gal. .64 - —
tanks, dlvd ..... gal. .41 - —
Lauryl, bots lb. 2.00 - 2.50
Methyl (see Methanol)
Methylamyl (see Methyl isobutyl carbinol).
Octyl, perfumer's grade, bots lb. 1.60 - 3.25
tech (see Octanol, normal)
β-Phenylethyl, extra, dms lb 1.14 1.45
standard, dms lb. 1.10 1.60
n-Propyl, dms., c.l., dlvd .... lb. .13½- —
l.c.l. dlvd ..... lb. .14½- —
tanks, dlvd ..... lb. .11 - —
Tetrahydrofurfuryl, dms., c.l. er t.l., f.o.b. Memphis, Tenn lb. .37 - —
l.c.l. or l.t.l. f.o.b. Memphis, Tenn lb. .38 - —
f.o.b. Newark, N. J lb. .40 - —
tanks, dlvd E of Denver lb. .363 - —
dlvd W of Denver lb. .375 - —
Tridecyl, mixed isomers, dms., dlvd lb. .26½- —
l.c.l. dlvd lb. .27½- —
tanks dlvd lb .24 — —
Wood (see Methanol)
Aldol, 95% dms. works lb .23 - —
denaturing grade dms gal 2.15 —
Aldrin tech. fib dms. c.l., t.l., dlvd. lb. .90 - —
l.c.l., dlvd ..... lb. .95 - 1.05
Aletris root, ogs lb 1.75 1.85
Algin (see Sodium alginate).

Alizarine (see 1,2-dihydroxy anthraquinone).
Allethrin, 90%, dms., frt. alld lb.28.80 -36.90
soln., 20% dms. 200-2,000 lb. lots, frt. alld lb. 5.50 6.55
2½% dms. frt. alld lb .95 1.00
Allspice (see Pimento)
Allyl bromide, 55-lb. cbys., 5,005 lbs. or more, works. lb. 1.40 - 1.47
1,045 to 4,950 lbs., works. lb. 1.45 - 1.52
55 to 990 lbs., works..... lb. 1.50 - 1.57
Chloride, dms., c.l., dlvd..... lb. .17½- —
l.c.l., dlvd..... lb. .18½- —
tanks dlvd..... lb .15 — —
Aloe, Cape, cs..... lb. .50 — —
powd., cs..... lb. .65 - —
Curacao, kgs ..... lb. .60 — —
Aloin, USP, bbls., dms., kgs.... lb. 3.50 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline)
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms. works 100 lbs 5.05 — —
powd., dms., works ... 100 lbs. 5.20 - —
USP, burnt, dms. .... lb. .20 — .21
hydrous, dms lb 07¾ .08
Potassium, gran., bgs., works. 100 lbs 4.55 — —
lump, dms. works 100 lbs 5.30 — —
powd. dms., works .. 100 lbs 5.45 — —
USP, burnt, dms ..... lb .20 — .21
hydrous, dms ..... lb 07¾ .08
Potash-chrome, dms ..... lb 17 —
Alumina, calcined, bgs. c.l., works. lb. .045- —
l.c.l., works lb. .048 .0755
Aluminum acetate, basic soln., 24% bbls., l.c.l., works lb. .14 - —

Aluminum chloride, com'l, anhyd., dms., c.l., works, frt. equald lb. .16 - —
l.c.l., works, frt. equald. lb 16½- —
cryst., dms., c.l., works..100 lbs. 16.00 - —
l.c.l., works 100 lbs. 17.50 — —
soln, 32° cbys, c.l. works lb. .044- —
l.c.l., works lb. .052- .1290
tanks, works 100 lbs. 3.45 —
NF, gran., dms., works lb. .29 .30
Fluoride, tech., anhyd., bgs., c.l., works lb. .16¾- —
l.c.l., works lb. .17¾- .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., dms., c.l., works lb. 12 - —
l.c.l., works lb. 12½- —
Hydrate, heavy, bgs., c.l., frt. equald lb. .032 —
20,000-40,000 lb. lots, same basis lb. .034- —
2,000-20,000 lb. lots, same basis lb. .044- —
bulk, same basis lb. .029- —
Hydroxide, gel, pharmaceutical, 14-15%, Al_2O_3, fib. dms., works lb. .22 - —
contract, works lb. .21 - —
Gel, 9-9½%, Al_2O_3, fib. dms., works lb. .19 - —
contract, works lb 18 —
dried, USP XIV, fib dms. works lb .82½- —
contract, works lb. .79½- —
tech. powder (see Aluminum hydrate)

Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld.... lb. .270- —
pigs 60,000-lb lots frt. alld. lb. .250- —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .68 - —
standard grade, dms lb. 48 - —
Powder, lining extra fine, dms lb. 1.09 - —
standard grade, dms lb 78½- —
Aluminum powder and paste prices are f.o.b. shipping point. Add 1c per lb for 100-lb dm., 1½c per lb for 50-lb dm., 3c. per lb. for 10-lb can and 5c to 12c per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.
Resinate, precip., 2.1% Al dms., lb. .33 —
Stearate, dibasic, ctns., c.l.,.... lb .39 - —
l.c.l. ..... lb .40 - .44
monobasic, ctns., c.l..... lb. .39 - —
l.c.l. ..... lb. .40 - .44
tribasic, ctns., c.l..... lb. .39 - —
l.c.l. ..... lb. .40 - .44
Sulfate, coml., bulk, c.l., works. 100 lbs 1.83 —
grd., bgs., c.l., works ton.37.00 —
lump, bgs., c.l., works ton.40.00 —

62%

HYDROBROMIC ACID

48%

WIDELY USED FOR BROMINATION and as an intermediate, Hydrobromic Acid has made a place for itself in the manufacture of dyes, drugs, perfumes, sedatives, photographic emulsions and in many other fields. Michigan Chemical Corporation assures a prompt and continuous supply of HBr of guaranteed purity at a reasonable price.

HYDROBROMIC ACID

ASSAY:	48% TECHNICAL	62% TECHNICAL
Molecular Weight:	80.924	80.924
Specific Gravity at 20/4°C:	1.488	1.74
Pounds per gallon at 20°C:	12.4	14.5
HCl, not more than:	0.10%	0.15%
Vapor pressure at 30°C:		85 mm
at 50°C:		380 mm

Michigan Chemical Corporation, for more than twenty years a quality producer of chemicals, offers a series of pure bromine derivatives, among them Ethyl Bromide, Monobromobenzene, Cyclopentyl Bromide and Hydrobromic Acid, specially made for use in pharmaceutical manufacturing. Write for further information or catalog.

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MICHIGAN CHEMICAL CORPORATION
534 Bankson Street, Saint Louis, Michigan
EASTERN SALES OFFICE: 230 Park Avenue, New York 17, New York

Aluminum sulfate, iron-free, bgs., c.l., works, frt. equald. 100 lbs. 3.55 - —
l.c.l. works frt equald. 100 lbs. 3.95 4.55
Aluminum sulfate prices $1 per ton higher in the South.
USP, gran., dms. works lb .29 - .30
powd., dms., works lb. .36 - .37
Trihydrate, heavy (see Aluminum hydrate heavy)
Ambergris, gray, bots oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld lb. 1.57 —
Aminoazotoluene base bbls., 100% basis lb 1.03 1.18
Aminoethyl ethanolamine dms., c.l., dlvd lb. .475 —
l.c.l. dlvd lb. .485 - —
tanks, dlvd lb 45 —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb 44 - —
l.c.l. frt alld lb. 45 - —
tanks, frt. alld lb 42 - —
m-Aminophenol, dist., dms., ton lots. lb 2.05 - —
smaller lots lb 2.50 - —
p-Aminophenol, dms., frt. alld lb 1.15 - —
Aminophylline, USP 100-lb dms lb 3.55 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.80.00 - —
refrigeration tanks works frt equald ton.82.50 - —
aqueous, tanks, works, anhyd basis ton.83.00 - —

Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 —
l.c.l., same basis 100 lbs. 9.25 - —
white (see Ammonium chloride tech.).
Ammonium acetate, purif., dms lb. .41 - —
Benzoate USP dms., kgs. 4,000-lb. lots frt. alld lb .80 —
smaller lots, frt. alld lb .81 1.08
Biborate, gran. dms. c.l., works ton.319.50 —
ton lots, ex whse ton.397.00 - —
smaller lots, ex whse ton.402.00 - —
Bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works 100 lbs. 9.00 —
Bichromate dms. works lb 42 43
Bifluoride, dms., dlvd lb. .2145- .2245
Bromide, NF, gran., bbls lb. .45 - —
Powdered ammonium bromide 10c per lb. higher
Carbonate, USP, lump dms. lb. .16 - —
Chloride, tech., fine gran., bgs., c.l., works 100 lbs. 5.75 —
l.c.l., works 100 lbs. 7.75 8.20
USP, gran. bbls., dms lb. 17¼ —
Citrate, dibasic, bbls lb. .77 —
Dichromate (see Ammonium bichromate).
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia accueous).
Hypophosphite, NF, dms. lb. 3.07 —
Iodide, NF, dms., bots lb 4.26 4.38
Linoleate, 80% dms., works lb .50 .55

Ammonium nitrate, dom., fert. grade, 33.5% N., bgs., western works, frt. equald, base price. ton.64.00 - —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton, base price ton.64.00 - —
August discount ton. 5.00 - —
western, bgs., c.l., f.o.b. cars, Los Angeles ton.79.69 - —
with dolomite, 20.5% N, bgs., Hopewell, Va. ton.51.00 - —
Oxalate, fine gran., dms lb. .26½- .31
Pentaborate, gran., bgs., c.l., works ton.187.50 - —
ton lots, ex whse ton.273.50 - —
smaller lots, ex whse ton.278.50 - —
Ammonium pentaborate powder $10 per ton higher
Persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
smaller lots, works lb. .20 - .23
Phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis lb. .10 - —
dibasic, NF, V bbls, dms lb. .46 - —
tech. bgs. c.l. works, frt. equald lb. .09¼- —
l.c.l., same basis lb. .10 - —
Salicylate, NF, dms., kgs. lb. 1.62 - 1.64
Silicofluoride, dms., works lb. .11¾- .13¼
Sulfamate, bgs., c.l., t.l., works lb. .18 - —
l.c.l., works lb. .22 - —
Sulfate, coke-oven, bulk, producing ovens, base price ton.32.00 - —
syn., bulk, c.l. f.o.b. works ton.32.00 -42.00
purif., dms., works lb. .10 - .10½
Sulfide, liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 - —
Sulfocyanide, tech. (see Ammonium thiocyanate).

Ammonium thiocyanate, tech., dms., c.l., works lb. .20 - —
l.c.l., works lb. .22 - .26
Thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.65
highly purif., cbys., 100% basis. lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, 5lb dms. frt alld lb. .65 —
d-Amphetamine hydrochloride, dibasic bots.18.00 -28.00
dl, dms lb. 4.50 - 6.00
d-monobasic, bots lb.18.00 -28.00
d-Phosphate, dibasic, bots lb.18.00 -28.00
dl, dms lb. 4.50 - 6.00
d-Sulfate, dms lb.18.00 -28.00
dl, dms lb. 4.50 - 6.00
Amyl acetate ex fusel oil, tech., dist. from 125° to 150°C, dms., c.l., frt. alld. E. of Rockies lb. .18½- —
l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 - —
syn., oxo process, dms., c.l., dlvd lb. .19¾- —
l.c.l., dlvd lb. .20¾- —
tanks, dlvd lb. .18 - —
ex pentane, reg. dms., c.l., dlvd. lb. .18½- —
l.c.l., dlvd lb. .19½- —
tanks, dlvd lb. .16 - —
tech., dms., c.l., dlvd lb. .16½- —
l.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
Alcohol (see Alcohol, amyl).
n-Butyrate dms lb. 1.00 1.25
Cinnamic, aldehyde, dms lb. 1.70 - 2.20
Nitrite, USP bots lb. 1.75 1.83
Salicylate, cns. dms lb. .82 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½- —
l.c.l., works lb. .50½- —
tanks, works lb. .47 - —
p-tert-Amyl phenol, dms., c.l., works. lb. .26¾- —
l.c.l. works lb. .27¾- —
tanks, works lb. .25¾- —
Anethole, cns., dms lb. 1.60 - 1.80
tech. dms lb. 1.10 1.15
Angelica root, dom., bls lb. .80 - .90
Aniline oil, dms., c.l., frt. alld lb. .22 - —
l.c.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .20 - —
tankwagons min. 2,000 gals. lb. .20½- —
Salt, dms. c.l. truckloads, 20,000 lbs., min. frt. alld lb. .33 - —
l.c.l., same basis lb. .35 - —
Anise seed, Mexican, bgs lb. .25 - —
Spanish, bgs lb. .25 - —
Syrian, bgs lb. .25 - —
Anisic aldehyde, bots., dms lb. 1.95 - 2.70
o-Anisidine, dms. c.l., frt. alld lb. .80 - —
l.c.l., same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms. works lb. .97 - —
Annatto seed, whole, bgs lb. .15 - .17
Anthracene 90-95% bbls., ton-lots, works lb. .83 - —
smaller lots, works lb. .95 - —
Anthraquinone, 99.5% bbls, c.l., frt. alld lb. .83 - —
l.c.l., same basis lb. .86 - —
electrical grade, bbls., l.c.l., same basis lb. .91 - —
Antimony butter (see Antimony trichloride)
Metal, bulk, c.l., mines lb. .33 - —
cs., c.l., mines lb. .33½- —
Oxide, bgs., c.l., frt. alld lb. .27 - —
l.c.l., frt. alld lb. .28½- —
Sulfide, approx. 65%, bgs., dlvd lb. .23 - .26
Trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
l.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., dms. lb. .69½- .74¼
USP, powd., dms lb. .74½- .75½
Antipyrine, NF, 200-lb. bbls. lb. 3.50 - —
Apomorphine hydrochloride, USP, 25 oz. lots oz.35.60 - —
Areca nuts, powd., bbls lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots kilo.74.80 - —
Arnica flowers (true Montana), bls. lb. 2.25 - —
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Trioxide, USP, dms lb. .48 - —
White, powd., bbls., c.l., works. lb. .04¼- —
l.c.l., works lb. .06½- .07¼
Asafetida, cn lb. .40 - —
powd., bbls., dms lb. .85 - —
Asbestine (see Talc, fibrous, N. Y.).
Asbestos, Canadian, crude,
6D, c.l. (30 tons), mines ton.82.00 - —
7D, c.l. (30 tons), mines ton.72.00 - —
7F, c.l. (30 tons), mines ton.68.25 - —
7H, c.l. (30 tons) mines ton.58.00 - —
7K, c.l. (30 tons), mines ton.48.30 - —
7M, c.l., (30 tons), mines ton.42.00 - —
7R, c.l. (30 tons), mines ton.41.00 - —
7RF, c.l. (30 tons), mines ton.42.00 - —
7T, c.l., (30 tons), mines ton.39.00 - —
7TF, c.l. (30 tons), mines ton.42.00 - —
Asbestos c.l. prices are in U. S. funds, l.c.l. lots $4 per ton higher
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.40.00 - —
select, 350° F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295°F., fusing pt., bgs., c.l., mines ton.40.00 - —
seconds, 300°-390°F fusing pt., bgs., c.l., mines ton.35.00 - —
Manjac, No. 10, crude, dms., works lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy. gal. .09 - —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 - —
85-300 penetration, tanks, tankwagon, refy ton.20.00 - —
Aspirin, (see Acid acetylsalicylic).
Atropine, USP, bots oz. 3.90 - 4.50
Sulfate, USP, bots lb. 2.10 - 2.55

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units. .70 - —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry root bark, bgs lb. .28 - .34
Barbital, NF, 100-lb. dms lb. 4.50 - —
Sodium, NF, dms lb. 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton.104.00 - —
smaller lots, works ton.114.00 - —
Chlorate, dms., works lb. .32 - .41
Chloride anhyd. bgs., c.l., works ton.172.00 - —
l.c.l., works ton.182.00 - —
NF, cryst., 100 lb. dm lb. .22 - —
tech., cryst., bgs., c.l., works. 100 lbs. 6.80 - —
l.c.l., works 100 lbs. 7.30 - —

versatile
CSC emulsifier
and chemical
intermediate

$CH_3C(CH_3)NH_2CH_2OH$

AMP

2-AMINO-2-METHYL-1-PROPANOL

use AMP as an emulsifier

AMP oleate is an economical emulsifier in water-wax emulsions. That's because AMP oleate is effective in lower concentrations than are required for comparable performance with other amine soaps. Emulsions made with relatively low concentrations of AMP oleate are stable and unchanged after repeated freeze-thaw cycles and heat stability tests. In properly formulated floor wax emulsions, AMP oleate imparts high gloss and excellent leveling characteristics.

The higher fatty acid soaps of AMP are powerful emulsifying agents in cleaners, polishes, dressings, self-polishing floor waxes, and emulsion-type paints. Evaporation loss and objectionable fumes are minimized during emulsion manufacture, due to AMP's relatively high boiling point. Films deposited from AMP-made emulsions have excellent water resistance and durability.

use AMP as a chemical intermediate

AMP forms substituted amides with esters, anhydrides, and acyl halides. AMP also reacts with alkyl halides, aldehydes, ketones, carbon disulfide, and many other compounds. These reactions suggest the use of AMP in the synthesis of surface-active agents, detergents, and vulcanization accelerators for rubber.

PHYSICAL PROPERTIES

Molecular Weight	89.14
Boiling Point, at 760mm	165°C
Melting Point	30-31°C
Specific Gravity at 20/20°C	0.934
pH of 0.1M Aqueous Solution at 20°C	11.3
Solubility	Miscible with water, aromatic hydrocarbons, alcohols, esters. Insoluble in aliphatic hydrocarbons.

SPECIFICATIONS

Neutral Equiv.	88.5-91.0
Color, APHA, max.	20
Water, by wt., max.	0.8%
Distill. Range	156°C-177°C
Below 161°C, max.	10%
Above 168°C, max.	5%
Odor	Characteristic
Non-volatile matter by weight, max.	0.005%

OTHER AMINOHYDROXY COMPOUNDS

AMPD (2-Amino-2-methyl-1, 3-propanediol) $CH_2OHC(CH_3)NH_2CH_2OH$

AEPD (2-Amino-2-ethyl-1, 3-propanediol) $CH_2OHC(C_2H_5)(NH_2)CH_2OH$

TRIS AMINO (Tris [hydroxymethyl] aminomethane) $(CH_2OH)_3CNH_2$

AB (2-Amino-1-butanol) $CH_3CH_2CHNH_2CH_2OH$

AMP is another important chemical derived from CSC's Nitroparaffins. For samples and additional information write to:

COMMERCIAL SOLVENTS CORPORATION

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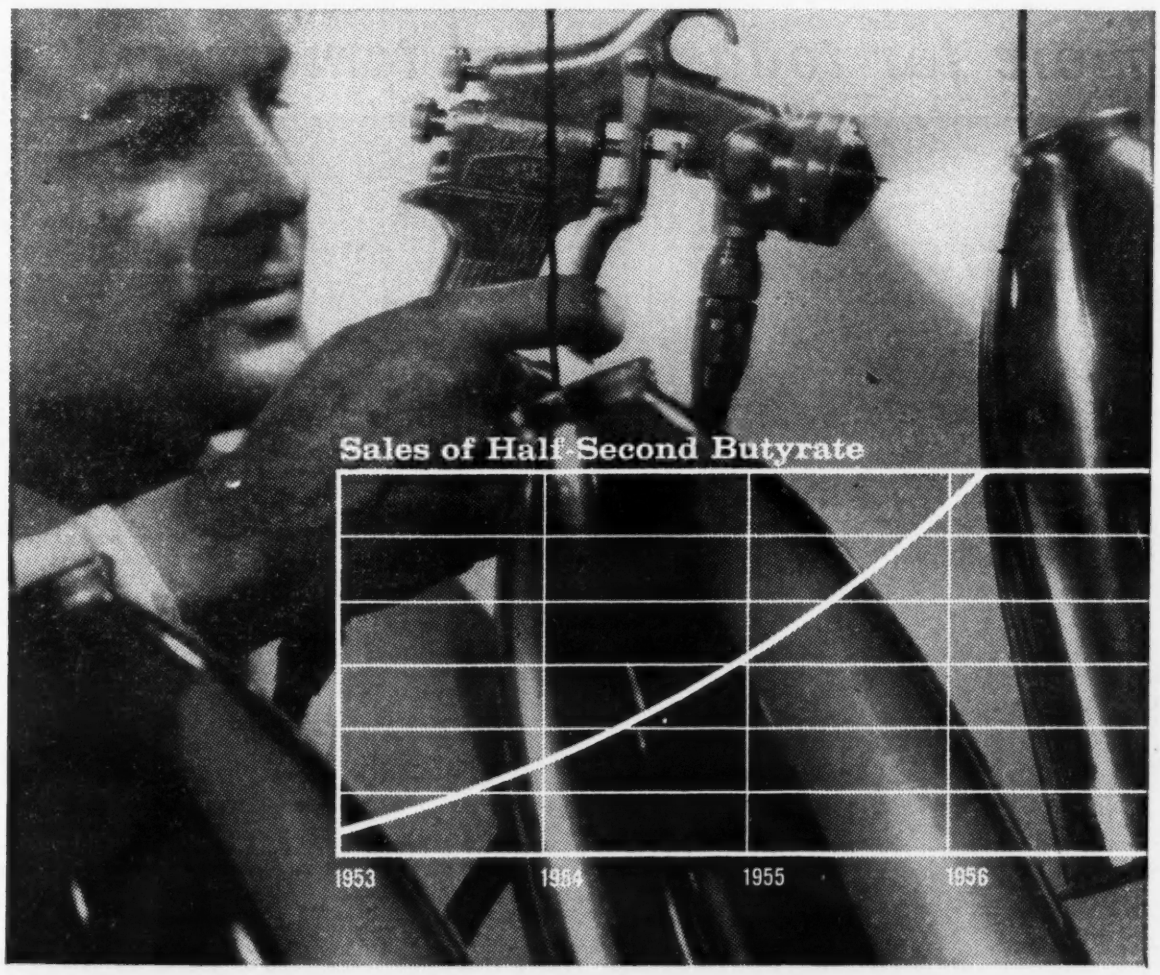
CSC INDUSTRIAL CHEMICALS

Barium chromate, bgs., frt. equald.	lb.	.33	—
Dioxide (see Barium peroxide)			
Hydrate, cryst., bgs., c.l., t.l., frt. equald	ton.	208.00	—
l.c.l. t.t.l. frt equald	ton.	218.00	—
Monoxide (see Oxide).			
Nitrate, bbls., c.l. t.l. dlvd	lb	16	—
l.c.l. l.t.l. dlvd	lb	17	—
Oxide, grd., dms., c.l., t.l., frt. equald	ton.	275.00	—
l.c.l. l.t.l. frt equald	ton.	285.00	—
Peroxide dms. frt equald	lb	20	—
Stearate, ctns., c.l., frt. alld	lb.	.41	—
l.c.l. same basis	lb.	.42	.46
Sulfate, tech. (see Barytes and blanc fixe)			
X-ray dms	lb	15	.15½
Sulfide, dms., c.l., works	ton.	95.00	—
l.c.l., works	ton.	105.00	—
Barytes, Southern off-color, bgs. mines	ton	25.00	—
95-75% bgs. mines	ton	25.00	—
water-grd. paper bgs., c.l., St Louis	ton.	49.00	—
ex-whse N Y	ton.	70.85	—
bauxite, bulk mines	ton	6.75	10.00
Bay leaves (see Laurel leaves)			
Belladonna leaf bls	lb	.35	.37
root bls	lb	.45	.50
Bentonite dom 200 mesh, bgs. c.l. mines	ton.	14.00	—
imp Italian white high gel bgs 5-ton lots ex whse	ton.	84.00	—
1 ton lots, ex whse	ton.	87.00	—
low gel bgs 5-ton lots, ex whse	ton.	82.35	—
1 ton lots ex whse	ton.	85.35	—
Benzal chloride chys, works	lb	44	—
Benzaldehyde NF dms	lb	74	1.05
tech cbys., dms., t.l.	lb	43	—
smaller lots	lb	44	—
Benzene (see Benzol).			
Hexachloride 25% and 99% gamma isomer (see Lindane), tech. high gamma dms c.l., dlvd. gamma unit-lb.		.0075	.008
t.c.l works gamma unit-lb.		.009	.0095
low gamma, dms., c.l., dlvd., gamma unit-lb.		.0075	—
t.c.l works gamma unit-lb		.009	—
Benzidine hydrochloride, bbls., c.l., frt alld., 100% basis	lb.	1.19	—
t.c.l. same basis	lb.	1.21	—
Sulfate tech frt alld., 100% basis	lb.	1.21	—
Benzocaine dms.	lb	3.48	3.50
Benzol, coaltar, pure or nitration tanks, works:-			
Bethlehem Pa	gal.	.36	—
Birmingham district	gal.	.36	—
Chicago district	gal.	.36	—
Cleveland district	gal.	.36	—
Geneva Utah	gal.	.36	—
Johnstown Pa	gal.	.36	—
Lackawanna N Y	gal.	36	—
Lone Star, Texas	gal.	36	—
Lorain, Ohio	gal.	.36	—
Middletown Ohio	gal.	36	—
Minnequa, Colo	gal.	36	—
Philadelphia district	gal.	.36	—
Pittsburgh district	gal.	.36	—
Sparrows Point Md	gal.	36	—
Syracuse N Y	gal.	36	—
Terre Haute Ind	gal.	36	—
Youngstown Ohio	gal	36	—
Petroleum, Houston Tex., tanks.	gal.	.36	.38
Benzophenone, dms	lb.	1.40	1.70
Benzotriazole tech dms. 1,000-lb. lots works	lb	2.25	—
Benzotrichloride, cbys, 1,000-lb lots or more, frt equald	lb	18	—
smaller lots frt equald	lb	20	—
Benzoyl chloride cbys dms., c.l., works, frt equald	lb.	.22	—
l.c.l. same basis	lb.	.23	—
tank trucks dlvd Metropolitan area	lb.	.21	—
Peroxide, purit. fib dms. 50 to 1,000-lb lots works	lb.	.98	1.08
Benzyl acetate f.f.c., cns. dms	lb	60	1.00
Alcohol (see Alcohol benzyl)			
Benzoate, NF, f.f.c., 500 lb. dms.	lb	.62	—
Chloride, tech., 18-gal. cbys., dms. c.l., works, frt. equald.	lb.	.23	—
l.c.l. same basis	lb.	.24	—
tank trucks dlvd Metropolitan area	lb.	.21	—
A 2½c differential is quoted on benzyl chloride in 5-gal cbys in steel dms prices were ½c lower			
Cinnamate, cns	lb.	3.60	3.90
Dimethylamine, dms., works	lb.	2.25	—
Formate, cns	lb.	1.80	2.10
Isoeugenol, cns	lb	9.85	—
Propionate bots.	lb	1.35	1.65
Salicylate, bots	lb.	1.60	1.85
Benzylidine acetone, bots	lb	1.75	1.80
Chloride (see Benzal chloride)			
Berberine bisulfate, cns	lb	35.00	36.25
Hydrochloride, bots	lb	35.00	36.25
Betaine, anhyd., 10,000-lb. lots, frt. alld	lb.	3.00	—
Hydrochloride, 5,000-lb. lots, frt. alld	lb.	1.60	—
Monohydrate, 10,000-lb. lots, frt. alld	lb.	2.60	—
Betagammapicoline (see b,g-Picoline).			
Betamethylnaphthalene (see b-Methylnaphthalene)			
Betanaphthol (see b-Naphthol).			
Betanaphthylamine (see b-Naphthylamine).			
Betaphenylethylamine (see b-Phenylethylamine).			
BHC (see Benzene hexachloride technical)			
Biotin cryst. bots	gram	10.00	—
Biphenyl (see DiphenyD.			
Bismuth chloride, jars	lb.	5.11	—
Hydroxide, dms	lb	4.85	—
Metal, bxs. ton lots	lb	2.25	—
Nitrate, cryst., dms.	lb	2.10	2.17
Oxide, anhyd., dms	lb	4.47	5.05
Oxychloride, dms	lb	4.37	4.42
Subcarbonate, USP, dms.	lb	3.20	—
Subgallate, NF, fib. dms.	lb.	3.15	—
Subiodide, fib. dms	lb	5.37	—
Subnitrate, NF, dms	lb	2.65	—
Subsalicylate, USP dms	lb	3.50	—
Bismuth-ammonium citrate, USP, powd jars	lb	4.22	—
Bisphenol-A, c.l., t.l., frt. alld	lb.	.29¾	—
l.c.l., same basis	lb.	30¾	—
Black, acetylene, imp., bgs., c.l., duty and freight extra	lb.	.19	—
cs., l.c.l., ex whse	lb.	.24½	.30
Ash (see Barium sulfide)			
Bone, dms. l.c.l., frt. alld	lb.	.17	.23¼
Pacific coast bone black prices 2c. per lb. higher			
Carbon, channel, pigment, high color beads, ctns., c.l., works.	lb.	.72	—
t.c.l. dlvd or whse.	lb.	78	—
medium color, uncompressed, bgs., c.l., works.	lb.	.13	—
t.c.l. dlvd or whse.	lb.	.19	—
Black, carbon, channel, rubber, beads, bulk, c.l., works	lb.	.07	—
bgs., c.l. works	lb.	.074	—
l.c.l., works	lb	1225	—
furnace fast extruding, bgs., c.l., works	lb.	.06	—
ctns., t.c.l., whse	lb	10	—
high abrasion, bulk, c.l. works	lb.	.0750	—
bgs., c.l., works	lb.	.0700	—
t.c.l., dlvd. or whse	lb.	.122	.125
high modulus, bgs., c.l., works.	lb.	.0550	—
ctns., t.c.l. whse	lb	0950	—
semi-reinforcing bgs., c.l., works	lb	045	—
bgs ctns t.c.l. whse	lb	085	—
Charcoal (see C.).			
Dyes (see Dyes).			
Graphite (see G).			
Iron oxide pure bgs. c.l., works.	lb.	13¼	—
t.c.l. works	lb	13½	—
Lamp bgs., c.l., works	lb.	.16	45
Mineral bgs., works	lb	0160	067
Blackberry root bark bls	lb	45	—
Black haw root bark bls	lb	63	65
tree bark bls	lb.	45	.50
Blanc fixe, direct process, bgs., c.l. works	ton.	110.00	—
t.c.l. works	ton	120.00	—
N Y whse	ton	155.00	—
Blood dried 16-16½% ammonia, unit-ton.		5.25	—
high grade, unground, 16-17% ammonia, bgs., Chicago unit-ton.		6.00	—
soluble, bgs., c.l.	lb.	.13	.14
t.l.	lb.	.15	.17
l.t.l.	lb.	.15½	.35½
Bloodroot bls	lb	.45	.50
Blue alkali dry, 250-lb bbls. dlvd, N of Tenn and N C., E of Miss R including St. Paul, Minneapolis, Davenport, Rock Island St. Louis	lb.	2.25	—
toner, litho flushed, 125-lb. bbls., same basis	lb.	1.28	—
Cobalt, genuine bbls. same basis.	lb	4.90	—
Imitation (see Blue, ultramarine)			
Dyes (see Dyes).			
Iron, reg., bbls., c.l., same basis.	lb.	.52	—
t.c.l., ton lots, same basis	lb.	.53	—
smaller lots same basis	lb.	.54	—
alkali-resisting, bbls., c.l., same basis	lb.	.57	—
t.c.l., ton lots, same basis.	lb.	.58	—
smaller lots same basis.	lb.	.59	—
Methyl, violet toner molybdated, PMA, bbls., same basis	lb.	2.80	—
tungstated, PTMA, bbls., same basis	lb.	4.35	—
Peacock, fugitive, 100% color strength, bbls., same basis	lb.	.90	—
Phthalocyanine, full strength, bbls., same basis	lb	3.45	—
resinated, bbls., same basis	lb	3.00	—
water dispersable, bbls., same basis	lb.	1.69	—
Blue, ultramarine, cobalt type, dry or pulp, bbls., same basis	lb.	.39½	.35
jobbing type bbls same basis	lb	19	—
regular types dry bbls same basis	lb	22½	35
Victoria toner molybdated, PMA bbls	lb	4.50	—
tungstated, PTMA, bbls	lb.	5.55	—
Blue dry colors, dlvd prices ½c higher Ala., Fla., Ga La (Shreveport 1¼c) Miss N C., S C Tenn Tex (El Paso 2c), Cedar Rapids, Des Moines Kansas City Lincoln, Omaha St. Joseph 1 6c higher Pac Coast Denver Pueblo, Salt Lake City Wichita frt equalized with Chicago			
Vitrol (see Copper sulfate).			
Bluestone (see Copper sulfate).			
Bonemeal, steamed works E	ton.	60.00	—
Los Angeles	ton.	82.50	—
Bone phosphate, defluorinated (see D) of lime (see Calcium phosphate, tribasic).			
precipitated (see Calcium phosphate tribasic, NF precip).			
Borax, tech., anhyd., 99%, bgs., c.l., works	ton.	83.00	—
ton lots ex whse, N Y or Chi	ton.	137.25	—
smaller lots, same basis.	ton.	142.25	—
bulk, c.l., works	ton.	74.00	—
cryst., 99½%, bgs., c.l., works.	ton.	71.00	—
ton lots, ex whse, N. Y. or Chi	ton.	125.25	—
smaller lots, same basis.	ton.	130.25	—



Use of Half-Second Butyrate is growing

Investigate this versatile film former

Since its introduction in 1953, the use of Half-Second Butyrate has been growing at a steadily accelerating pace.

First used to produce clear, durable lacquers for the protection of outdoor aluminum surfaces, Half-Second Butyrate is now being employed in a rapidly expanding number of important applications. In wood lacquers, for instance, it provides non-yellowing protection for light wood surfaces. In paper lacquers, it makes possible high-gloss films that resist scuffing, blocking and darkening. In bronzing lacquers, it means a non-gelling vehicle that does not react with metallic pigments.

Safely shipped and easily handled as a dry powder, Half-Second Butyrate produces films of low color and high clarity with excellent strength and flexibility at high and low temperatures. It can be formulated with readily available, low-cost solvents. Extremely stable to ultra-violet light, Half-Second Butyrate films retain their initially low color, high strength and flexibility for long periods. No other easily-sprayable, air-drying film former exhibits this combination of characteristics to such a high degree. In addition, Half-Second Butyrate films possess excellent abrasion resistance and are little affected by prolonged water immersion.

If you need a protective coating to decorate metal, wood, glass, plastic, paper or foil, consider the advantages and versatility of Eastman Half-Second Butyrate. Write for samples and information.

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of Eastman Kodak Company

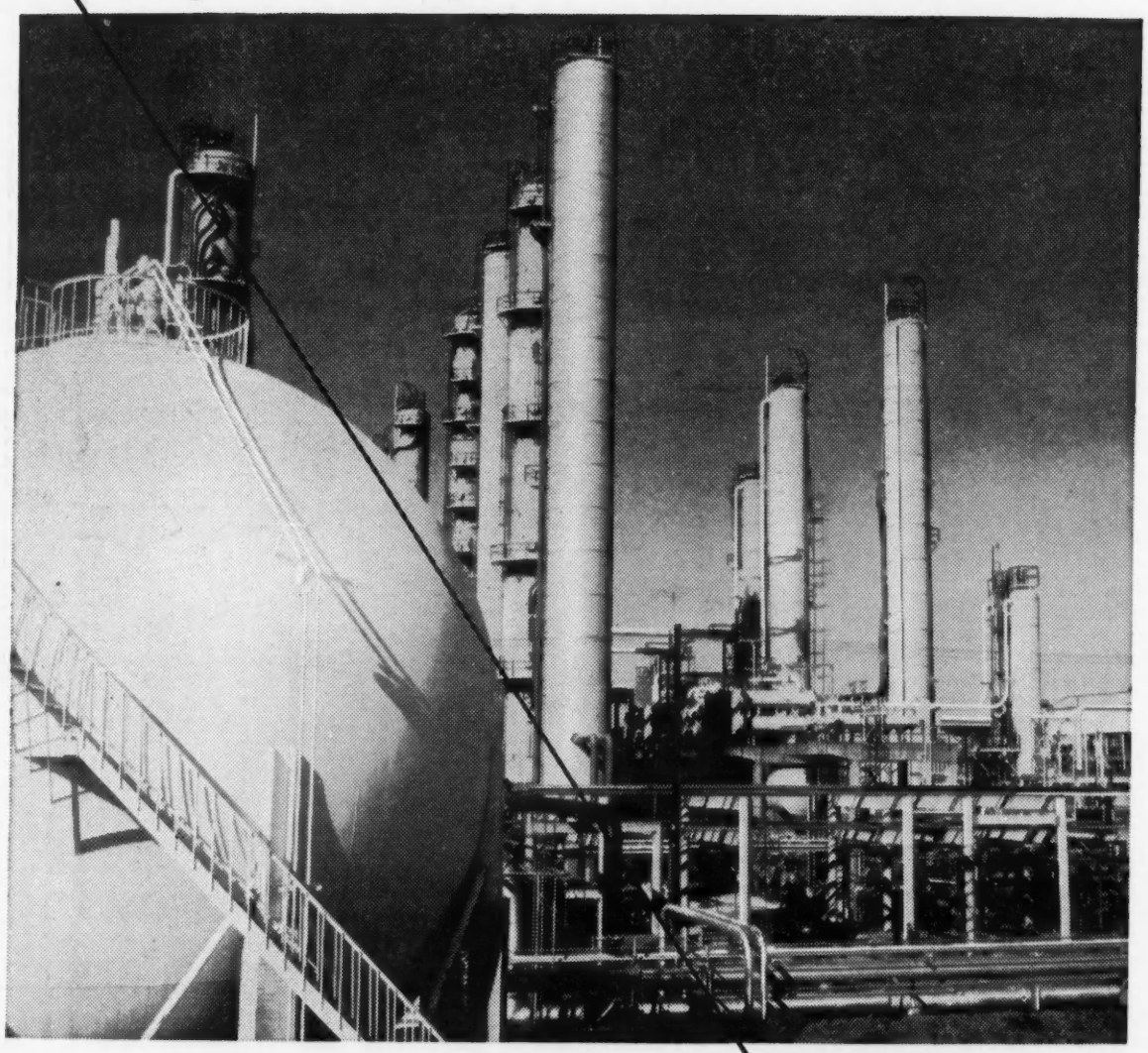
SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; St. Louis; Houston.
West Coast: Wilson Meyer Co., San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Borax, gran., decahydrate, 99½%, bgs., c.l., works ton 45.00 - —
ton lots, ex whse. N. Y. or Chi ton 99.25 - —
smaller lots, same basis, ton 104.25 - —
bulk, c.l., works ton 38.50 - —
Pentahydrate, 99%, bgs., c.l., works ton 60.00 - —
ton lots, ex whse. N. Y. or Chi ton 114.25 - —
smaller lots, same basis, ton 119.25 - —
bulk, c.l., works ton 53.50 - —
powd., bgs., c.l., works ton 50.00 - —
ton lots, ex whse. N. Y. or Chi ton 104.25 - —
smaller lots, same basis, ton 109.25 - —
USP borax $15 per ton higher
Bordeaux mixture, bgs., c.l., works, frt. alld or nearest whse pt. lb. .18 - .24
l.c.l. same basis lb. .19 - .26
Borneol, cns lb. 2.50 - 4.50
Boron trifluoride gas, cyls., truckload, works lb .62 - —
l.t.l. works lb. 70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., c.s., c.l., t.l., dlvd. E. of Rockies lb. .33 - —
l.c.l., same basis lb. .35 - .40
Bromine, purif., ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
l.c.l., same basis lb. .32 - .34
tanks, same basis lb. .23½ - —
Bromochloromethane dms., c.l., frt. equald lb. .48 —
l.c.l., same basis lb. .50 —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys. lb. 1.80 - 1.90
Bromstyrol, bots lb. 5.40 5.70
Bronze powder aluminum (see A).
Brown iron oxide pure bgs., c.l., works lb. .14¼ - —
l.c.l. works lb. .14½ - —
Oxide, metallic, bgs., works lb. .04 - —
Sienna burnt, paper bgs., c.l., works lb. .06¼ - .17¼
l.c.l., works lb. .06½ .17½
raw, paper bgs., c.l., works lb. .06¼ - .16¼
l.c.l., works lb. .06½ - .16½
Umber, burnt, American, c.l., works. lb. .07 - .07¾
l.c.l., works lb. 07¼ 08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N Y lb. .07¾ —
raw, American bgs., works lb. .07½ - .08¼
Turkey-type, bgs., works lb. .06¾ .07
Vandyke, bbls., works lb 09½ - .12
Brucine, cns., 100-oz. lots oz. .15 - .20
Sulfate, NF, cns., 100-oz lots oz. .12 - .18
Buchu leaves, bls lb. 1.30 - —
Butadiene, refd., cyls., c.l. refy lb. .21 - —
l.c.l., refy. lb. .22 - —
tanks, refy lb. .15 - —
Butane, indust., tanks, group 3 gal. .05 - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .16½ - —
l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .14 - —
syn., dms., c.l., dlvd. E. lb. .16½ - —
l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .14 - —
sec-Butyl acetate syn. dms., c.l., dlvd. E lb. .13½ - —
l.c.l., same basis lb. .14¼ - —
tanks, same basis lb. .11¾ - —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde)
Chloride, dms., c.l., works lb. .37½ - —
l.c.l., works lb. .38¼ - —
Ether, dms., c.l. works lb. .33 - —
l.c.l., works lb. .33¾ - —
tanks, works lb. .31 —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
l.c.l. same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Laurate, dms., works lb. .37½ - —
Methacrylate dms. c.l. t.l. works. lb. .55 —
l.c.l., works lb. .55½ - —
Oleate, refd., dms., l.c.l., works lb. .32 - —
Phenylacetate, dms. lb. 4.50 4.60
Phthalate (see Dibutyl phthelate).
Stearate, dms., frt. alld. E. of Mississippi lb. .26 - —
l.c.l., same basis lb. .26½ - —
Butylamine (see mono-, di- and tri-).
lb. .25 - —
6-tert-Butyl-m-cresol, dms., c.l., works lb .55 - —
l.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works. lb. .27½ - —
l.c.l. lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb. 19½ —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide 25-lb. fib dms lb. 6.75 7.00
Metal ingots or sticks, cs. dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous dms. 100-lib. lots or more lb 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, 100-lb lots or more lb. 2.80 - —
Citrated USP dms. 100-lb. lots or more lb. 2.70 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots works. gram .65 - —
In edible oil (see Viosterol)
Calcium p-aminosalicylate, fib. dms., 100 lbs or more frt. adjusted. lb. 4.00 - —
Arsenate dealers ngs. c.l., frt. alld lb. 09 09½
Bromide, NF, 100 lbs. or more lb. .97 - —
Carbide, standard generator size, dms., c.l., dlvd ton. 134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 10.50 - —
chalk whiting 325 mesh, bgs., c.l., works ton. 32.00 -34.00
l.c.l., same basis lb. .10 - .10½
water-grd., ½ to 10 microns, bgs., c.l., works ton. 30.00 —
10 to 20 microns, bgs., c.l., works ton. 17.00 -18.00
precip dense bgs. c.l. works ton. 32.50 - —
l.c.l., works ton. 42.50 - —
medium, bgs., c.l., works ton. 38.00 - —
l.c.l. works ton 48.00 —
surface treated bgs., c.l., works ton. 37.50 —
l.c.l. works ton. 47.50 —
ultrafine, bgs., c.l., works. ton. 110.00 -160.00
l.c.l., works ton 120.00 -175.00
Chloride, gran., purif., dms. lb. .27 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald. ton. 31.00 - —
liquor, 40%, tanks, frt. equald. ton. 12.50 - —
pellets, bgs., c.l., works. ton. 37.80 - —
powd., bgs., c.l., works. ton. 37.00 - —
solid, 73-75%, dms., c.l., frt. equald. ton. 29.50 - —
l.c.l., works, frt. equald. ton. 36.00 -73.00
USP gran. dms. lb .32 —
Chromate, bgs., frt. equald. lb. .29½ - .30
Cyanide, dms. c.l., dlvd. E. of Rockies lb. .20 —
l.c.l., same basis lb. .24 - .55
Cyclamate, 100-lb. fib. dms. lb. 2.95 - —
Gluconate, AA, bbls., dms. lb. .74 - .76
USP bbls., dms lb. .67 69
Hydride, dms., works lb. 2.15 3.00
Hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs. 22.95 -25.10
100-lb. dms., same basis dm. 30.80 -34.50
Hypophosphite, dms., 1,000-lb. lots. lb. 1.28 - —
Iodide, jars lb. 4.59 —
Lactate NF, dms., 10,000-lb. lots or more works lb. .36 .40
Mandelate, USP, dms., works lb. 2.10 2.25
smaller lots, works lb. .41 - .48
Naphthenate liq., 4% Ca., dms., frt equald lb. .27¼ - —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton. 46.00 - —
tech., 5-dm. lots, works lb. .13 - —
Pantothenate, dms. bots., frt. adjusted gram. .045 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate)
Phenolsulfonate, dms lb. .74 - —
Phosphate, dibasic USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
l.c.l., frt. equald 100 lbs. 8.50 - —
feed grade, 18½%P, bgs., c.l., t.l., frt. equald ton. 79.55 -83.25
l.c.l., frt. equald ton. 89.55 -93.25
21% P, bgs., c.l., t.l., frt. equald. ton. 94.50 - —
l.c.l., frt. equald ton. 99.50 -104.50
monobasic, bgs., 10,000-lb. lots, frt. equald. 100 lbs. 7.20 - —
smaller lots, same basis, 100 lbs. 7.70 - —
tribasic, NF precip., bgs., c.l., works, frt. equald. 100 lbs. 9.25 - —
l.c.l., frt. equald. 100 lbs. 10.50 - —
Phylate, bgs., works lb. .50 - —
Resinate, precip. dms. frt. alld., works lb. .30½ - —
Silicate, hydrated, bgs., c.l., works. lb. .06 - —
l.c.l., works lb. 06½ - —
paint grade (see Wollastonite).
Stearate, ctns., c.l. lb. .39 - —
l.c.l. lb. .40 - .44
Sulfate (see Gypsum)
Calomel, USP, powd., dms. lb. 5.42 - —
Camphene 46° m.p. dms., incl., c.l., works lb. .15 - —
l.c.l. same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Chlorinated, 67-69% (see Toxaphene).
Camphor monobromated NF, dms., kgs. lb. 3.50 - —
nat USP powd. cs. 100-lb lots. lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .85 - .90
syn., tech., 1 bbls or more lb. .48 - —
USP, gran. powd. bbls., 2,000-lb. lots lb. .59 - —
1,000-lb. lots lb. .60 - —
smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
1,000-lb. lots lb. .91 - —
smaller lots lb. .92 - —
Canada balsam (see Fir balsam).
Cantharides, Chinese, cs lb 2.00 2.05
powd., bxs lb 2.25 2.30
Russian, bgs lb 4.00 4.05
powd., bxs lb. 4.35 4.40
Capsicum (see Pepper red).
Oleoresin, NF, from domestic pepper, dms lb 4.50 - 5.25
from African pepper, dms lb. 4.35 5.00
Caraway seed, Dutch, bgs. lb. .17 - —
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon black (see Black, Carbon).
Dioxide, indust., wholesale, bulk, dlvd. Metropolitan area ton. 73.00 -115.00
cyls., same basis lb. .08 - .09
solid, same basis lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb. .07 - —
l.c.l., same basis lb. .08½ - .09
5-gal dms., 30 dms to c.l., same basis lb. .13 - —
less than 30 dms lb. .16 - —
tanks, dlvd. lb. .0545 —

more for today... and tomorrow



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While providing substantially greater butadiene output for present and prospective users, we also will soon have pure isomers of n-butylene 1 and n-butylene 2 at attractive prices for new markets and products. Other butane-derived products and applications are being investigated.

Petro-Tex will do everything possible to foster broader development and use of polymers and co-polymers based on these four-carbon chemical building-blocks.

BUTADIENE

Petro-Tex

PETRO-TEX CHEMICAL CORPORATION

HOUSTON 1, TEXAS

JOINTLY OWNED BY

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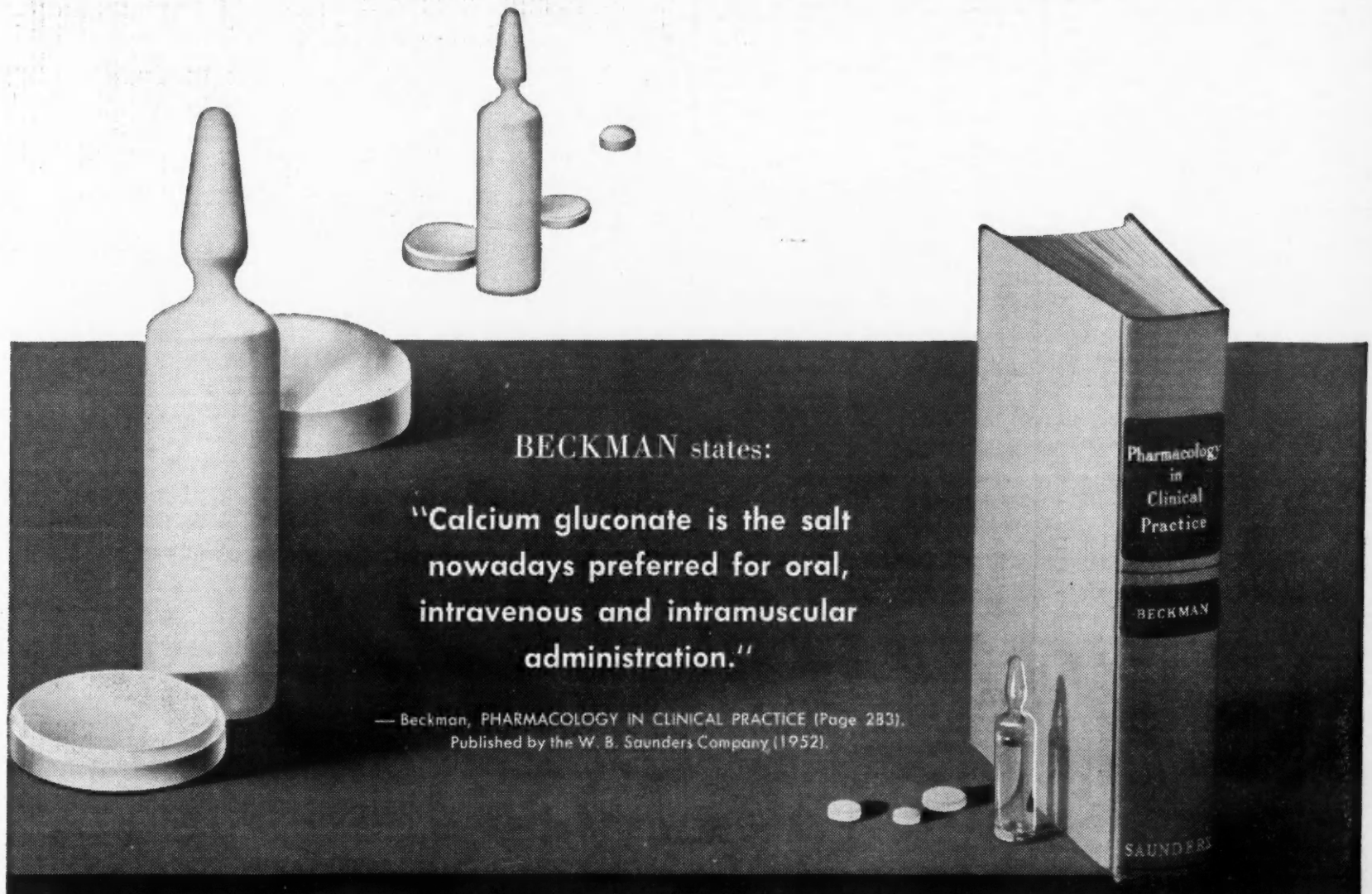
BECKMAN states:
"Calcium gluconate is the salt nowadays preferred for oral, intravenous and intramuscular administration."
— Beckman, PHARMACOLOGY IN CLINICAL PRACTICE (Page 283). Published by the W. B. Saunders Company (1952).
Pharmacology in Clinical Practice
BECKMAN
SAUNDERS

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. . . MANUFACTURED TO MAKE FORMULATING EASY

Mallinckrodt calcium gluconate, made electrolytically, is the right starting material for the production of clear, stable solutions. Calcium Gluconate USP for Parenteral Solutions yields exceptionally clear products. Calcium Gluconate USP Powder is particularly adaptable for tableting and capsuling.

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SPECIFY *Mallinckrodt*

- CALCIUM GLUCONATE
- IODIDES
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- PHENOBARBITAL
- IRON SALTS
- MAGNESIUM TRISILICATE
- MERCURIALS

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IN CANADA: **MALLINCKRODT CHEMICAL WORKS LIMITED** • MONTREAL • TORONTO

Carbon tetrachloride, CP, consumers, dms., l.c.l., frt. alld lb. .12¼- .14½
tech. consumers dms. c.l., frt. alld lb. .11¼- —
l.c.l. frt alld lb. .13½- —
tanks, frt. alld lb. .10 - —
Carboxymethyl cellulose (see CMC).
Carbromal NF dms. 100-lb lots, works lb 4.00 4.25
smaller lots, works lb 4.10 4.75
Cardamom seed, bleached "A" lb 3.20 - —
"B" lb 3.10 - —
decorticated, Ceylon, cs lb 3.00 - —
Guatemalan, cs lb 3.00 - —
green, Alleppey, bgs lb 2.15 - —
Ceylon, bgs lb 2.15 - —
Carmine No 40, NF bulk, 100-lb lots or more, dlvd lb.16.80 - —
smaller lots, dlvd lb.16.90 -17.30
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram. .295 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works, million units. .12 - —
microcrystalline in oil, 400,000 A units per gram, dms., dlvd, million units. .21 - —
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram, cns gram. .35 - —
in vegetable oil, 400,000 A units per gram, cns gram. .084 - —
Carvol, bots lb. 4.50 - 8.00
Cascara sagrada bark, bulk lb. .36 - —
Casein, dom., acid precip., standard, bgs., 10,000-lb. lots or more, shipt.point lb. No prices.
premium, bgs., 10,000-lb. lots or more, shipt. point lb. No Prices
imp., acid-precip., grd., Argentine, bgs., c.l., duty paid lb. .23¼- .23¾
New Zealand, duty paid lb. .25 - .26
Cashewnut shell liquid, treated, dms. c.l. Newark N J lb 22 - —
ton lots same basis lb 23 - —
dm lots same basis lb 25 - —
Cassia, Batavia, "A," bls. lb 22 - —
"B" lb. .21 - —
"C" lb. .20 - —
Corinje, "A" lb. .20½- —
"B" lb. .19½- —
"C" lb. .18 - —
Castor beans, bgs, f.o.b. Brazil ton.185.00 Nom.
Oil (see Oil castor)
Pomace, bgs., c.l., works ton.45.50 - —
Castoreum, nat. cns lb 5.25 -30.00
syn. cns lb 9.00 —
Catechol CP cryst., fib dms., works lb 2.17½- —
resub. dms. works lb 4 29½- —
Catnip leaves, Southern bls lb 75 - —
Celery seed, French, bgs lb. .41 - —
Indian, bgs. lb. .21 - —
Cellulose acetate, flake, powd. ctns., bgs 100-lb lots or more, dlvd. E lb. .35 - .46
Acetate-butyrate, powd., 17% butyryl content, bgs. dlvd. E lb. .545 .555
27% butyryl content, bgs., dlvd E lb .595 .605
38% butyryl content, bgs., dlvd E lb .545 .555
50% butyryl content, bgs., dlvd E lb. .585 .595
nail-second bgs dlvd E lb .545 .555
Scrap (see Pyroxylin scrap)
Cerium chloride, 48% dms., dlvd. lb. .30 - —
Hydrate 74% CeO_2, fib dms. 100 lb lots or more lb 1 44 - —
77% CeO_2, fib dms. 100-lb lots or more lb 1 74 - —
Oxalate, NF, 48%, bgs., works lb 1.32 - —
Oxide, optical grade bgs 50 lb lots or more dlvd lb 1 85 1.98
smaller lots, dlvd lb. 2.03 - 2.23
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian style, cs lb. .85 - .95
Roman, cs lb. 3.00 - —
Charcoal, activated, NF, fib dms., c.l. works lb 25 - .32
5-ton lots, works lb 26½ .32½
smaller lots works lb 27 - .50
Bone (see Black bone)
Hardwood, bulk, lump, c.l., f.o.b. plant ton.55.00 - —
briquets, bulk, c.l. f.o.b plant ton.80.00 - —
5 lb paper bags, c.l., same basis ton.108.00 - —
10 lb paper bags, c.l., same basis ton.98.00 - —
25 lb. paper bags, c.l same basis ton.88.00 - —
40 lb. paper bags., c.l., same basis ton.85.00 - —
Pinewood, gran., bgs., c.l., works, South ton.57.00 - —
l.c.l., works, South ton.57.00 -67.00
lump, bgs., c.l., works, South ton.53.50 - —
l.c.l., works, South ton.56.50 -71.00
bulk, c.l., works, South ton.35.00 - —
t.l., works, South ton.41.00 - —
Chestnut extract, imp., solid, 60% tannin, bgs., exdock, plus duty, lb. .0933- —
powd., 70% tannin, bgs., exdock, plus duty lb. .1085- —
Chloral tech. 94% min. dms., c.l., works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —
Hydrate, USP, 1,000-lb. lots lb. .83 - —
500-lb. lots lb. .88 - —
100-lb lots or less lb. .93 - —
Chloramine T NF bbls, works lb. 75 - 1.00
Chlordan, agricultural dms. c.l., frt alld lb. .65 - —
t.c.l. 5,000 to 10,000-lb lots, frt alld lb. .66 - —
clarif., dms., c.l., frt alld lb. .69 - —
l.c.l. 5,000 to 10,000-lb lots, frt alld lb. 70 - —
Chlorinated paraffin, 42%, dms., c.l., frt alld lb. .16¼- —
t.c.l. same basis lb. .17¼- —
70%, dms. c.l. same basis lb. .18¾- —
l.c.l. same basis lb. .19¾- —
Rubber 5, 10, 20 cps ctns c.l., works lb. .60 - —
l.c.l., works lb. .61 - —
125, 1,000 cps ctns., c.l., works lb.70 - —
l.c.l., works lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt equald lb .10¼ —
t.c.l. Metropolitan area lb .11¾ .13
tanks, single units, works, frt. equald 100 lbs 3.15 - —
multiple units 5 cars, works, frt equald 100 lbs 4.05 - —
3 cars same basis 100 lbs 4.25 - —
2 cars, same basis 100 lbs 5.25 - —
1 car, same basis 100 lbs 7.25 - —

4-Chloro-2-aminotoluene fused, bbls. lb 1.45 - —
m-Chloroaniline, dms. min. 10,000 lbs. or over, frt alld lb. 75 - —
less than 10,000 lbs., same basis lb. .80 - —
tanks, same basis lb. .73 - —
o-Chloroaniline dms. c.l. frt. alld. lb. .65 - —
l.c.l., same basis lb. .67 - —
tanks, same basis lb. .63 - —
p-Chloroaniline dms c.l. frt. alld. lb. .77 - —
l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
l.t.l., works lb 1.20 - —
p-Chlorobenzaldehyde, dms. c.l., works lb 1.95 - —
Chloroform tech. dms. c.l. dlvd. E lb .18 - —
t.c.l., same basis lb .19 - —
tanks, same basis lb .17 - —
USP dms lb .30 - —
2-Chloro-4-nitroaniline paste dlvd. E. 100% basis lb 81 - —
powd. dlvd E. 100% basis lb 86 - —
4-Chloro-2-nitroaniline powd dlvd. E lb 80 - —
o-Chlorophenol dms. c.l. frt equald lb. .37 - —
l.c.l., same basis lb .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
l.c.l., same basis lb .38 - —
Chloropicrin coml bots lb 1.50 - —
cyls., 180 lbs. frt alld lb .95 - —
100 lbs. same basis lb .97 - —
25 lbs. same basis lb. 1.22 - —
Choline bitartrate fib dms. frt adjusted lb 1.25 1.35
Chloride fib dms. frt adjusted. lb. 1.25 1.35
Dihydrogen citrate fib. dms. frt. adjusted lb 1.25 1.35
Chromium acetate soln. 7½% bbls., works lb. .09½ —
cbys. works lb. 11¼ —
Fluoride bbls. works lb 51 52
Green (see Green chromium oxide)
Oxide (see Green chromium oxide)
Trioxide, NF, bots lb. 1.15 - —
Yellow (see Yellow chrome)
Cinchona bark NF red broken, bgs lb .35 .40
yellow, broken, bgs lb. .35 .40
Cinnamic aldehyde dms lb. .95 1.25
Cinnamon, Ceylon No 2, bgs lb. .98 - —
"0000," bgs., afloat lb. 1.08 - —
Citral bots. cns lb 4.90 5.90
Citronellal bots. dms lb 2.85 3.50
Citronellol, bots., dms lb. 4.10 - 4.40
Civet, artif, bots lb 13.75 -15.00
nat, bots oz 8.50 -15.00
Clay, ball dom. airfloated, bgs. c.l., Tenn ton.19.50 —
crushed shed moisture, bulk, c.l. Tenn ton 10.00 - —
purif. bgs. c.l. Tenn ton 20.50 - —
imp., airfloated, bgs., c.l., Atl port long-ton 42.00 45.00
lump bulk Atl port long-ton 27.00 30.20
China, dom., dry grd airfloat 99% 325 mesh, bgs. c.l. Georgia works ton.10.00 —
t.c.l. Georgia, works ton.15.50 - —
300 mesh, bgs., c.l., Georgia, works ton 13.50 -14.50
t.c.l., same basis ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex-dock, Phila., Portland, Me gross ton.20.00 -35.00
powd. bgs. c.l. ex dock net ton 50.00 —
t.c.l. ex whse net ton 60.00 65.00
Clove, Madagascar, bgs lb. .42½ —
Zanzibar bgs lb. .47 - —
CMC, crude, 96%, low or medium, vis. bgs. or fib dms., 23,000 lbs. dlvd E. 100% basis lb. .39½ .41
less than 23,000 lbs., dlvd E. 100% basis lb. .41½ .43
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .39½ .41
t.c.l. dlvd E. 100% basis. lb. .41½ .43
purified, high vis. (see Gum Cellulose),
standard, low or medium vis., bgs. 23,000 lbs. or over, works, frt alld lb .55 - —
smaller lots, same basis lb .57 - —

CMC prices W of the Rockies are 2c per lb lower and are on a works basis.

Coaltar crude resale for soins. dms., c.l. ex-whse gal. 30½ —
l.c.l., ex-whse gal. .33½- —
tanks, ex works gal. .17 - —
refd., resale, industrial, dms., c.l., ex-whse gal. .30½ .35
l.c.l., ex-whse gal. .33½- .39
tanks, works gal. .16½- .20½
Cobalt acetate, 23.7%, dms., dlvd. lb. 1.10 - —
Carbonate, 46% powd., bgs., dlvd. lb. 1.57 - —
Chloride, 24.2% Co., dms., dlvd. lb. 1.05 - —
Hydrate, 60-61% Co., dms., dlvd. lb. 2.20 - —
Linoleate, fused, 8½% Co., dms. lb. .68 - —
liq., 6% Co., dms lb. .54¾- —
Metal, 97-99%, kgs., ex whse lb. 2.00 - —
Naphthenate, liq., 6% Co., dms., dlvd lb. .46½- —
Nitrate, 20.1% Co., bbls., dlvd. lb. .85 - —
Oxide, black, 72½-73½% Co., kgs lb. 1.52 - —
70-71% Co., kgs lb. 1.48 - —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.43 - —
Resinate, fused, 3% Co., dms lb. .28 - —
Sulfate, cryst., 21% Co., dms., dlvd lb. .69 - —
monohydrated, 33% Co., dms., dlvd lb. 1.17 - —
Tallate, 6% Co., dms., dlvd lb. .42 - —
Cocaine, USP, cns. 100-oz lots oz. 17.80 - —
Hydrochloride, cns. 100-oz. lots, oz. 13.75 - —
Cocilana bark, bls. lb. .25 - —
Cocoa butter, bgs lb. .67 - .70
Codeine NF cns. 100-oz lots oz. 13.25 - —
Hydrochloride, cns. 100-oz lots, oz. 11.75 - —
Phosphate, USP cns. 100-oz lots, oz. 10.25 - —
Sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb .20 - .22
blue, bls lb 20 22
Colchicine, USP, bots., cns oz. 29.00 -35.50
Colchicum root, bls lb. .35 - —
seed, bgs lb .60 - —
flexible, dms lb. .34 - —

Colocynth, pulp, bls lb. .85 - —
Colombo root, bls lb. .15 - .16
Collodion, USP, dms lb. .32½- —
Condurango bark, bales lb. .26 - —
Copaiba balsam, cns., dms lb. .60 - .95
Copper acetate, bbls., c.l., works lb. .53 - —
l.c.l., works lb. .54 - —
Carbonate, 55%, bgs., c.l., works, lb. .34 - —
l.c.l., works lb. .35½- —
Chloride, cupric, anhyd., dms., works lb. .43½- .44
cryst., dihydrate, dms., works, lb. .29½- .30
dried, dms., works lb. .37¾- .38¼
cuprous, dms., works lb. .43 - .47
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .74½- —
1,000-lb. lots or more lb. .75½- —
smaller lots lb. .77½- —
Gluconate dms lb 3.15 3.35
Hydrate, dms., c.l., frt. alld. E. of Miss lb. .51½- —
l.c.l., same basis lb. .52 - —
Metal, electrolytic, dlvd. Valley basis lb. .32 - —
Naphthenate, liq. 8% Cu dms., frt. alld lb. .24 - —
Nitrate, tech., cryst., dms., works, lb. .33¼- —
Oleate, solid, 9% Cu, dms., works, lb. .45 - —
Oxide, black, bbls., 100-1,999-lb. lots, works lb. .50 - —
red 97% USN Type I, bbls., 100-5,000-lb. lots lb. .61 - —
90% USN Type II bbls., 100-5,000 lots or more works, lb. .60½- —
Oxychloride, dms. c.l. works lb. .52 - —
l.c.l., works lb. .53½- .63½
Quinolinolate fib dms lb 4.25 4.50
Resinate precip. dms., frt. alld, lb. .34 - —
Sulfate, CP, gran., dms., works, lb. .1980- —
cryst., 99%, bgs., c.l., works, 100 lbs.12.90 - —
l.c.l., same basis 100 lbs.13.40 -16.90
monohydrated, 35%, dms., c.l., works 100 lbs.22.50 - —
l.c.l., works 100 lbs.23.25 - —
tribasic, distributors, bgs., c.l., same basis 100 lbs.28.00 - —
l.c.l., same basis 100 lbs.29.00 -33.00
Undecylenate, dms lb. 2.00 - 3.00
Copra, Atlantic Gulf ports, c.i.f ton.155.00 - —
Pacific ports, c.i.f. lb.150.00 - —
Coriander seed, Moroccan, bgs lb. .12 - —
Roumanian bgs lb. 09 - .09½
Yugoslavian bgs lb. .08½- —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs min. 100 lbs. 7.32 - —
l.c.l. 100 lbs. 7.57 - —
Syrup, 42° non-ret. dms. c.l. 100 lbs. 7.30 - —
l.c.l. 100 lbs. 7.45 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, NNR bulk gram 3.50 3.55
Cottonseed meal, 41% bgs., Memphis ton.54.00-55.00
Cramp bark, NF bls lb 85 .90
Coumarin, NF cryst. dms lb 3.60 —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF bots, cbys. lb. 3.08 3.26
Coaltar crude tanks works frt. adjusted gal. .24 - —
soln., 80%, tanks, works gal. .226 - —
refd. dms., c.l., works gal. .42 - .44
t.c.l. same basis gal. .53 - .55
tanks same basis gal. .33 - .35
Wood, beachwood, cbys., dms. lb. 1.60 - 1.65
hardwood NF bots. cbys lb 1.30 1.35
pinewood, dms., c.l., incl. lb. .0561- —
t.c.l. incl lb. .0634- —
N Y whse lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech. 50% below 204°C., dry above 207°C. wide distillation range, non-ret. dms., c.l., frt equald lb. .1625- —
t.c.l. same basis lb. .1675- —
tanks same basis lb .145 —
USP, non-ret. dms., c.l., same basis lb. .1775- —
t.c.l., same basis lb. .1825- —
tanks same basis lb. .160 - —
m-Cresol, 95-98% dms. c.l., works, lb. .60 - —
t.c.l. works lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .1775- —
t.c.l. same basis lb. .1825- —
tanks same basis lb. .160 - —
2.97%, 2°C., dms., c.l., frt. equald, lb. .2175- —
t.c.l. same basis lb. .2225- —
tanks, same basis lb. .200 - —
o-Cresol, m.p. 30.5° C. and over, ret. dms., c.l., frt. equald lb. .16¾- —
t.c.l., same basis lb. .17¼- —
tanks, same basis lb. .15 - —
30°-30.49° C., ret. dms., c.l., frt. equald lb. .16¼- —
t.c.l., same basis lb. .16¾- —
tanks, same basis lb. .14½- —
29°-29.9° C., ret. dms., c.l., frt. equald lb. .15¾- —
t.c.l., same basis lb. .16¼- —
tanks, same basis lb. .14 - —
25°-28.9°C., dms., c.l., frt. equald. lb. .14¾- —
t.c.l., same basis lb. .15¼- —
tanks, same basis lb. .13 - —
p-Cresol, 98% dms. c.l. dlvd lb. .50 - —
t.c.l. dlvd lb. .51 - —
tanks dlvd lb. 49 - —
Methyl ether, cns lb. 1.80 - 2.05
Crotonaldehyde, 91-93% dms., t.c.l., works lb. .24¼ .25
Cryolite, nat. indust., bgs., c.l., works 100 lbs.13.00 - —
t.c.l., works 100 lbs.14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .29 - —
Cubeb berries, XX, NF, bgs lb. 70 - —
powd., cs lb. .85 - —
Cumene, dms., c.l., works lb. .12 - —
t.c.l., works lb. .14 - —
tanks, works lb. .11 - —
t.c.l., works lb. .30 - —
Cumin seed, Iranian, bgs lb. .18½- —
Moroccan, bgs lb. .22 - .23
Turkish, bgs. lb. N.P.
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08½- —
Cyanamide fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton.55.00 - —
pulv. 21% N, bgs., works, unit-ton 2.75 - —
Indust. grade, bgs., c.l., works ton.75.00 - —
t.c.l., works ton.96.00 - —
6-16 mesh, dms. c.l., works ton.120.00 - —
t.c.l., works ton.140.00 - —
Cyclohexane, 99% tech., dms., c.l., works gal. .70 - —
t.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt alld., E lb. .28 - —
t.c.l., works, same basis lb. .29 - —
tanks, works, same basis lb. .24 - —
Cyclohexanone, tech., dms., c.l., works lb. .32½- —
t.c.l., works lb. .35 - —
tanks, works lb. .29 - —

Cyclohexene, min. 98% b.r., 82.5°C-85°C, 360-lb. dms., c.l., works lb. .55 - —
t.c.l., same basis lb. .60 - —
tanks, same basis lb. .52 - —
Cyclohexylamine, dms., c.l., works, lb. .49 - —
t.c.l., works lb. .50 - —
tanks, works lb. .47 - —
Cyclopropane, CP, 2-lb. cyls., works, cyl.48.00 - —
6 oz. cyls., works cyl.12.00 - —
USP, hospitals cyls., 40-gal. lots, gal. .38 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

D

2,4-D tech. dms., c.l., works, frt. equald lb. .37 - —
t.c.l., same basis lb. 42 46
Butyl ester dms. c.l., works, lb. .40 —
t.c.l. same basis lb. .45 .49
tanks, same basis lb. .39 - —
Isopropyl ester dms., c.l., works, lb. .40 —
t.c.l. works lb. .45 .49
tanks, works lb. .39 - —
Dandelion root, bls lb. .32 - —
DDD, tech. flake, grd. fib dms., c.l. works lb. .45 - —
t.c.l. works lb. .46 —
DDT powder bgs c.l. works, frt equald lb. .23 .27
smaller lots, same basis lb. .24 .28
fib dms., c.l., same basis lb. .24 .28
smaller lots, same basis lb. .25 .29
1-Decanol, tech., dms. c.l., dlvd lb. .41 —
t.c.l. dlvd lb. .43 —
tanks, dlvd lb. 38½- —
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P paper bgs., c.l., t.l., works ton.49.50 - —
17%P paper bgs. c.l., t.l. works ton.58.00 - —
18% P. paper bgs., c.l., t.l., works ton.64.10 - —

Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices

Degras, common, bbls lb. .10 - .12
neutral, bbls lb. .21 - .23
d-Desoxyephedrine hydrochloride, bots lb.24.00 -25.00
dl, bots lb 6.50 —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.33 - —
t.c.l. 100 lbs. 9.48 - —
canary, dark, paper bgs., c.l. 100 lbs. 9.17 - —
t.c.l. 100 lbs. 9.32 - —
light paper bgs., c.l. 100 lbs. 9.07 - —
t.c.l. 100 lbs. 9.22 - —
white paper bgs., c.l. 100 lbs. 8.91 - —
t.c.l. 100 lbs. 9.06 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher
Potato imported bgs lb. .10½- .11
Dextrose, USP, dms lb. .17¾- —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb. 4.25 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
t.c.l. works lb. .33 - —
tanks, works lb. .29½- —
Di-tert-amyl phenol, dms., l.c., works lb. .32 - —
t.c.l. works lb. .33 - —
tanks, works lb. .29½- —
o-Dianisidine fib. dms lb. 2.00 —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .99
t.c.l. same basis lb. .90¼- .91
tanks, same basis lb. .88 - —
p-Dibromobenzene bgs., 500-lb lots, lb. .55 - —
Dibutyl fumarate, dms., c.l., t.l., frt. alld. lb. .33 - —
t.c.l., l.t.l., frt. alld lb. .34 - —
tanks, frt. alld lb. .30½- —
Maleate, dms., c.l., t.l., frt. alld, lb. .33 - —
t.c.l., l.t.l., dms., frt. alld lb. .34 - —
tanks, frt. alld lb. .30½- —
Phthalate, dms., c.l., dlvd. E lb. .32½- —
t.c.l. same basis lb. .33½- —
tanks, same basis lb. .30 - —
Sebacate, dms., c.l., works lb. .66 - —
t.c.l., works lb. .66¼- .67
tanks, works, dlvd lb. .64 - .64½
Tartrate dms works, frt. alld. lb. .64 - —
Dibutylamine, dms., c.l., dlvd lb. .55½- —
t.c.l. same basis lb. .56½- —
tanks, same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l. c.l., dlvd lb. 1.20 - —
t.t.l., dlvd lb. 1.24 - —
tech., dms., c.l. lb. .91 - —
t.c.l. lb. .95 - —
tanks lb. .86 - —
Dicaprvl phthalate dms. c.l. dlvd., lb. .31 - .32
t.c.l. dlvd lb. .32 - .33
tanks, dlvd lb. .27½- —
Sebacate, dms., c.l., works lb. .63 - —
t.c.l. works lb. .63½- .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms. c.l., frt. alld. E lb. .12¼- —
t.c.l. same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
p-Dichlorobenzene, dms., c.l., f.o.b., works lb. .12 - .14½
t.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms. c.l. or t.l., works lb. .33½- —
t.c.l. or t.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
t.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works, lb. .54 - —
t.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼- .59
t.c.l., same basis lb. .59¼- .60
Didecyl phthalate, dms., c.l., works, lb. .34 - —
t.c.l. same basis lb. .35 - —
tanks, same basis lb. .31½- —
Dieldrin, dms., frt. alld lb. 1.80 - —
t.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms., c.l., dlvd. E, lb. .27 - —
t.c.l., same basis lb. .28 - —
tanks, same basis lb. .24½- —
Diethyl carbonate, dms., c.l., frt. alld lb. .47 - —
t.c.l. same basis lb. .48 - —
tanks, same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .69½- —
t.c.l., dlvd lb. .70½- —
tanks, dlvd lb. .67 - —
Oxalate, dms., c.l., frt. alld lb. .42 - —
t.c.l. same basis lb. .43 - .45
tanks, same basis lb. .40 - —

Diethyl phthalate, dms., c.l., dlvd.	lb.	.30	.30½
l.c.l., dlvd.	lb.	.31	.31½
tanks, dlvd.	lb.	.27½	.28
Sulfate, dms., c.l., works	lb.	.19	—
l.c.l., works	lb.	.19¾	—
tanks, works	lb.	.17	—
Diethylamine, dms., c.l., dlvd. E	lb.	.51	—
l.c.l., same basis	lb.	.52	—
tanks, same basis	lb.	.48½	—
N,N-Diethylaniline dms., c.l., frt. alld	lb.	.57	—
l.c.l. same basis	lb.	.58	—
tanks, same basis	lb.	.55	—
Di-2-ethylhexyl adipate (see Dioctyl adipate).			
Phthalate (see Dioctyl phthalate).			
Diethylene glycol dms c.l dlvd E.	lb.	.17¾	—
l.c.l. same basis	lb.	.18¾	—
tanks, same basis	lb.	.15¼	—
Boriborate dms. l.c.l.	lb.	.31	—
Diethyl ether dms. c.l. works.	lb.	.47½	—
l.c.l., works	lb.	.48¼	—
Monobutyl ether dms., c.l., dlvd. E	lb.	.30¾	—
l.c.l. dlvd E	lb.	.31¾	—
tanks, dlvd E	lb.	.28¼	—
Acetate, dms., c.l., works.	lb.	.30¼	—
l.c.l., works	lb.	.31	—
tanks, dlvd E	lb.	.28¼	—
Monoethyl ether dms., c.l., dlvd	lb.	.22½	—
l.c.l., dlvd	lb.	.23½	—
tanks, dlvd	lb.	.20	—
Acetate, dms., c.l., works.	lb.	.27¼	—
l.c.l., works	lb	.28	—
tanks, dlvd E	lb.	.25¼	—
Monomethyl ether dms., c.l., dlvd	lb.	.20½	—
l.c.l., dlvd	lb.	.21½	—
tanks, dlvd.	lb.	.18½	—
Diethylenetriamine dms., c.l. dlvd. E	lb.	.44	—
l.c.l. dlvd E	lb.	.45	—
tanks, dlvd E	lb	41½	—
Diethylstilbestrol, USP, bots. 10-kilo lots	kilo.	100.00	147.50
1 kilo lot	kilo.	110.00	152.50
Digitalis leaves USP dom dms	lb.	1.25	—
Digitoxin, USP, bots	gram.	4.40	5.00
Diglycol laurate, dms	lb.	.32¾	.34
Stearate dms., ton lots	lb.	.26	.28
Dihexyl sebacate dms. c.l. works.	lb.	.64	—
l.c.l. works	lb.	.64½	.65
tanks works	lb.	.62	—
Dihydrazine sulfate, dms., works.	lb.	1.10	1.25
Dihydrostreptomycin hydrochloride, bulk	gram.	.0850	.0875
Sulfate, bulk	gram.	.0850	.0875
1,2-Dihydroxy anthraquinone, dms., works	lb.	2.75	—
2,2-Dihydroxy-5-5-dichloro diphenyl-methane, pure, dms	lb.	2.55	—
tech., dms	lb.	1.09	—
Di-isobutyl ketone, dms., c.l., dlvd.	lb.	.17	—
l.c.l. dlvd	lb.	.18	—
tanks, dlvd	lb.	.14½	—
Phthalate, dms., c.l., dlvd E	lb.	.31½	—
l.c.l., same basis	lb.	.32½	—
tanks, same basis	lb.	.29	—
Di-isobutylene, dms., c.l., dlvd. E.	lb.	.10	—
l.c.l., dlvd. E.	lb.	.11½	—
tanks dlvd E	lb.	.08	—
Di-iso-octyl phthalate, dms., c.l., dlvd	lb.	.31	—
l.c.l. same basis	lb.	.32	—
tanks, same basis	lb.	.28½	—
Sebacate, dms., c.l. works	lb.	.63½	—
l.c.l., works	lb.	.64½	—
tanks, works	lb.	.61	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¼	—
l.c.l. same basis	lb.	.24¼	—
tanks, same basis	lb.	.20¾	—
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies	lb.	.50½	—
l.c.l., same basis	lb.	.51½	—
tanks, same basis	lb.	.48	—
Dill seed, dewhiskered, bgs	lb.	.09¼	—
nat., bgs	lb.	.08	—
Dimethyl anthranilate, cns	lb.	4.35	5.10
Ethanolamines, anhyd., dms., c.l., dlvd	lb.	1.225	—
l.c.l., dlvd	lb.	1.235	—
tanks, dlvd	lb	1.20	—
70% dms. c.l. dlvd. 100% basis, contained amines	lb.	.68½	—
l.c.l. dlvd. 100% basis	lb.	.69½	—
tanks, dlvd. 100% basis	lb.	.66	—
Hydroquinone, dms	lb.	2.20	2.25
Phthalate, dms., c.l., works	lb.	.31	—
l.c.l., works	lb.	.32	—
tanks, works	lb.	.28¼	—
Sebacate dms., c.l., works	lb.	1.275	—
l.c.l. dlvd	lb.	1.285	—
tanks, works	lb.	1.25	—
Sulfate, 55-gal. ret. dms., c.l., works	lb.	.15	—
l.c.l., works	lb	.16	—
10-gal ret. dms., l.c.l. works.	lb.	.16¼	—
Dimethylamine, 25% soln., dms., c.l., frt. equald	lb.	.42	—
l.c.l., frt. equald	lb.	.42½	—
tanks, frt. equald	lb.	.33	—
40% soln. dms. c.l. frt. equald.	lb.	.39	—
l.c.l. frt. equald	lb.	.39½	—
tanks, frt. equald	lb.	.33	—
N,N-Dimethylaniline, dms., c.l., frt. alld	lb.	.32	—
l.c.l. frt. alld	lb.	.33	—
tanks, frt. alld	lb.	.30	—
N,N-Dimethylformamide dms., works.	lb.	.34	.39
tanks, works	lb.	.33	—
2,4-Dinitroaniline, dms., 1,000-lb. lots, same basis, frt. equald	lb.	.68	—
smaller lots, frt equald	lb.	.71	—
m-Dinitrobenzene, 85°C., dms	lb.	.22	—
89°C., dms	lb.	.24	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E	lb.	.15¼	—
l.c.l., frt. alld E	lb.	.15¾	—
tanks, frt alld E	lb.	.15	—
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. ald. E.	lb.	.20¼	—
l.c.l. frt. alld. E	lb.	.20¾	—
tanks, frt. alld. E	lb.	.20	—
2,4-Dinitrophenol, bbls	lb.	.37	—
2,4-Dinitrotoluene, oily, dms.	lb.	.11	—
refd., 63°C., dms	lb.	.23	—
Dioctyl adipate dms., c.l., works.	lb.	.42½	—
l.c.l., works	lb.	.43½	—
tanks, works	lb.	.40	—
Phthalate, dms., c.l., frt. alld.	lb.	.30½	.31
l.c.l., frt. alld.	lb.	.31½	.32
tanks, frt. alld	lb.	.28	.28½
Sebacate, dms., c.l., works	lb.	.60½	—
l.c.l., works	lb.	.61½	.62½
tanks, works, dlvd	lb.	.58	.58½
1,4-Dioxane, dms., c.l., works	lb.	.28¾	—
l.c.l., same basis	lb.	.29¼	—
tanks, same basis	lb.	.27	—
Dip oil (see Tar acid oil).			
Dipentaerythritol, bgs., l.c.l., works.	lb.	.35	—
Dipentene, dest-dist., dms., c.l., works	gal.	.47	—
l.c.l., works	gal.	.52	—
ex-whse	gal.	.62	—
steam-dist., dms., c.l., works, South.	gal.	.59	—
dlvd. N. Y.	gal.	.67	—
tanks, works, South	gal.	.45	—

Diphenyl, bbls., c.l., works	lb.	.15	—
l.c.l., works	lb.	.16	—
Diphenyl in bags ¼c. lower.			
Oxide, perfume grade, cns	lb.	.56	.61
Phthalate, dms., c.l., works	lb.	.51¾	—
l.c.l., works	lb.	.53¾	—
Diphenylamine, refd. flake, bgs., c.l., works frt equald	lb.	.33	—
l.c.l., works, frt. equald	lb.	.35	—
fused, tanks, works, frt equald.	lb.	.31	—
tech., fused, tanks, works, frt. equald	lb.	.30	—
Diphenylguanidine, bgs., dms., ton lots, frt. alld	lb.	.52	—
smaller lots, frt. alld.	lb.	.53	—
Diphenylhydantoin-sodium USP, dms	lb	5.00	5.60
Dipropylene glycol dms. c.l., frt. alld	lb.	.17¾	—
l.c.l., same basis	lb.	.18¾	—
tanks, same basis	lb.	.15¼	—
Monomethyl ether dms., c.l., dlvd E	lb.	.20	—
l.c.l., same basis	lb	.21	—
tanks, same basis	lb.	.18½	—
Di-o-tolylguanidine, dms., ton lots, frt. alld	lb.	.62	—
smaller lots, frt. alld	lb.	.63	—
Divi-divi, 45% tannin, bgs., bls., c.l., U. S. ports, exdock	ton.	80.00	—
Divinylbenzene, 20-25% dms., c.l., works, frt equald	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.19	—
50-60%, dms., c.l., works, 100% basis	lb	1.00	—
l.c.l., works, 100% basis	lb	1.05	—
Dodecylbenzene, dms., c.l., frt. alld	lb.	.14	—
l.c.l., same basis	lb.	.15	—
tanks, same basis	lb.	.13	—

Dyes coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb lots, dlvd:—			
Blue FD & C No 1	lb.	15.65	17.60
No 2	lb.	15.65	17.60
Green FD & C, No 1	lb.	15.65	17.60
No 2	lb	19.60	22.85
No 3	lb.	21.30	35.90
Red, FD & C, No 1, cns	lb	5.90	7.85
No 2	lb	3.30	4.10
No 3	lb	19.60	22.85
No 4	lb	5.55	7.50
Violet FD & C, No 1, cns	lb	15.65	17.60
Yellow FD & C, No 1, cns	lb	9.15	11.05
No 5	lb	3.30	4.10
No 6	lb	3.30	4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb lots, dlvd:—			
Black D&C No 1	lb.	10.50	10.95
Brown D&C No 1	lb	15.65	16.10
Green D&C No 5	lb	15.65	16.10
No 6	lb	15.65	16.10
No 7	lb.	14.35	14.80
Orange, D&C No 3	lb	10.50	10.95
No 4	lb	19.60	20.05
No 5	lb	5.25	5.70
Red, D&C, No 17	lb.	10.50	10.95
No 18	lb.	23.55	24.00
No 19	lb.	15.50	15.45
No 21	lb	3.10	3.60
No 22	lb	10.50	10.95
No 28	lb.	24.20	24.65
No 33	lb.	17.00	17.45
Violet D&C, No 2	lb.	15.65	16.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd.:—			
Yellow D&C No 7	lb.	10.50	10.95
No 8	lb	10.50	10.95
No 10	lb.	13.05	13.50
No 11	lb	13.05	13.50
Dyes coaltar certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd.:—			
Blue Ext D&C No 1, cns	lb	15.65	16.10
Green, Ext. D&C, No. 1, cns	lb	15.65	16.10
Red, Ext. D&C, No 1 cns	lb	13.05	13.50
Yellow Ext D&C No 1 cns	lb.	10.50	10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract dlvd. No			
20 Chrysoidine Y dustless	lb	89	—
27 Fast light, orange 2G	lb.	1.29	—
31 Phloxine 2G	lb.	1.05	—
36 Yellow 2G	lb	1.18	—
40 Orange R, extra, conc	lb.	1.52	—
57 Fuchsine 6B	lb.	1.55	—
79 Scarlet 2R	lb.	1.16	—
151 Orange AD	lb.	.79	—
161 Orange RR	lb.	.94	—
176 Fast red A	lb.	1.39	—
179 Rubine XX, conc	lb.	1.48	—
180 Blue F4B	lb.	1.31	—
185 Brilliant scarlet 3RN, conc.	lb.	1.20	—
202 Chrome blue black R, conc.	lb.	1.07	—
203 Chrome black T	lb.	.94	—
208 Fast blue SR	lb.	1.30	—

Have we checked Columbia-Southern lately? T.J.

First producer to improve shipments by promoting customer aids like the fusion welded tank car and the 55-ton single unit car.

Say, that's right!—DHT, Purchasing

First producer to cut customer costs by launching a fleet of high capacity barges for inland water deliveries.

I remember that! RPM, Finance

First producer to standardize on the tank car dome platform for added safety in customer unloading.

Meant a lot to us then—and now!
ANH, Plant Safety

First producer to reduce customer freight costs by opening facilities on the Ohio, pioneering the development of America's "Chemical River."

Every body sure followed them!
CBW Traffic

Still one of the nation's leading merchant producers of chlorine, with all the dependability of supply, control of quality, and depth of customer servicing this leadership implies.

No question about it!
JTH, Technical Staff

So often, it costs less to deal with the leader.

Let's check Columbia-Southern today! DHT
RPM, ANH, CBW, JTH

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Cincinnati • Charlotte • Chicago • Cleveland • Boston
New York • St. Louis • Minneapolis • New Orleans • Dallas • Houston
Pittsburgh • Philadelphia • San Francisco
IN CANADA: Standard Chemical Limited and its Commercial Chemicals Division

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd No

216 Chrome red B ..... lb. 1.09 • —
234 Brown Y ..... lb. 1.27 • —
246 Blue black, extra, conc .. lb. 1.37 • —
275 Milling red 3R, conc .... lb. 1.91 • —
289 Navy blue 3R, conc .... lb. 1.70 • —
299 Black F, conc ..... lb. 2.19 • —
304 Neutral black 2B, conc. lb. 2.61 • —
326 Fast scarlet 4BNC .... lb. 2.12 • —
332 Bismark brown RX, conc., dustless lb. 1.37 • —
365 Brilliant yellow, conc .... lb. 3.67 • —
382 Scarlet B ..... lb. 2.60 • —
401 Diazo black BHD ..... lb. .93 • —
406 Blue 2B, extra conc ..... lb. 1.53 • —
419 Red FC ..... lb. 1.45 • —
420 Brown M ..... lb. 1.40 • —
448 Red 4BX, conc ..... lb. 1.69 • —
518 Diamine sky blue FF, extra, conc lb. 1.95 • —
561 Brown B ..... lb. 2.89 • —
581 Black EB, 200% ..... lb. 1.03 • —
593 Green BY, conc ..... lb. 1.13 • —
596 Yellow brown K, extra lb. 1.26 • —
620 Yellow 2G ..... lb. 1.31 • —
639 Fast Yellow GG ..... lb. 2.32 • —
640 Yellow XX ..... lb. 2.30 • —
655 Yellow OX ..... lb. 2.64 • —
657 Green V ..... lb. 2.73 • —
662 Brilliant green G ..... lb. 3.62 • —
667 Milling green 6B, conc .... lb. 4.78 • —
671 Blue EG ..... lb. 1.98 • —
681 Crystal violet powder .... lb. 2.15 • —

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd No

698 Violet 6BN powder ..... lb 2.25 • —
720 Brilliant blue BBG ..... lb 2.44 • —
729 Blue B, extra conc ..... lb 3.61 • —
749 Red BX ..... lb. 5.62 • —
800 Chinoline yellow ZSS ..... lb. 2.67 • —
814 Yellow NN, conc ..... lb. 3.67 • —
841 Safranine GF, extra, conc. lb. 4.11 • —
860 Induline base ZM ..... lb. 1.07 • —
865 Nigrosine J ..... lb. 4.76 • —
922 Blue GXX ..... lb. 2.22 • —
978 Black GXCF, conc ..... lb. .38 • —
1034 Alizarine red SC ..... lb. 2.85 • —
1054 Alizarine blue SAPX .... lb. 3.78 • —
1078 Alizarine green CG, extra. lb. 3.53 • —
1085 Alizarine blue black B lb. 3.02 • —
1096 Golden orange GFD, single paste lb. 2.58 • —
1099 Dark blue BO, single paste lb. 2.28 • —
1101 Jade green N supra double paste lb 1.10 • —
1106 Blue RS, double paste lb. 3.85 • —
1113 Blue BLFD, double paste lb. 2.93 • —
1150 Olive R, single paste .. lb. 1.42 • —
dms. dlvd.
1151 Brown R, single paste .... lb. 2.29 • —
1171 Indigo synthetic 20% paste. lb. 31 • —
1217 Orange RD, double powder. lb 4.60 • —
p-4 Brown PG ..... lb. 3.00 • —

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd No

p-14 Brown EB ..... lb. 2.16 • —
p-24 Gray L ..... lb. 2.08 • —
p-80 Diazo brilliant scarlet ROAD lb. 3.62 • —
p-202 Diazo black VJ, conc .... lb. 2.48 • —
p-244 Brilliant scarlet BN ..... lb. 1.70 • —
p-313 Naphthol SWF ..... lb. 2.24 • —

Dyes, coaltar, oil-soluble, 100-lb. drums., dlvd.

24 Oil orange Z-7078 ..... lb. 1.06 • —
73 Oil scarlet BL ..... lb. 1.70 • —
1073 Oil violet ZIRS ..... lb. 6.81 • —
1078 Alizarine cyanine green base Z lb. 6.13 • —
1000 Oil violet special Z ..... lb. 6.81 • —
Oil black ZBC ..... lb. 4.46 • —
Oil black ZBD ..... lb. 3.03 • —
Oil black ZHH ..... lb. 4.61 • —
Oil black ZMM ..... lb. 6.52 • —
Oil blue ZN ..... lb. 6.02 • —
Oil blue ZV ..... lb. 4.95 • —
Oil orange ZMG ..... lb. 1.32 • —
Oil red Z-1700 ..... lb. 1.49 • —
Oil yellow ZG, conc ..... lb. 6.33 • —

Dyes, coaltar, spirit soluble, 100 lb. dms. dlvd.

p-517 Spirit yellow ZR ..... lb. 4.62 • —
p-520 Spirit orange ZR, conc ... lb. 5.87 • —
Spirit black ZRB ..... lb. 2.95 • —
Spirit brown ZG ..... lb. 5.30 • —
Spirit red ZB, conc ..... lb. 6.41 • —

E

Echinacea root, bls ..... lb. 1.10 • —
Egg albumin (see Albumin).
Yolk, dried, dom., bbls ..... lb. 1.05 • 1.07
tanners, bbls ..... lb. .06 • .06½

Elm bark, grinding, bls ..... lb. .30 • .33
powd., bbls., bxs ..... lb. .45 • —
select, bundles ..... lb. .75 • —
Emetine hydrochloride, USP, bots oz.48.25 • 49.00
Endrin, tech., dms., dlvd., 100% basis lb. 3.75 • —
Ephedrine, syn., USP, anhyd., bots, 100-oz lots oz. .98 • 1.00
hydrous bots, 100-oz lots oz. .92 • —
Hydrochloride, tins, 100-oz. lots. oz. .65 • .75
Sulfate, cryst., tins, 100-oz. lots. oz. .65 • .72
powd, tins, 100-oz. lots .... oz. .66 • .73
Epichlorohydrin, dms., c.l., dlvd .. lb. .35½- —
l.c.l., dlvd ..... lb. .36½- —
tanks dlvd lb. .33 • —
l-Epinephrine, base syn., USP, bots., 100 gram lots gram. .60 • —
Epsom salt (see Magnesium sulfate)
Ergot, NF dms. tin-lined .... lb 2.00 • —
Eserine salicylate, bots ..... oz.72.50 • 84.00
Sulfate bots ..... oz.87.75 • —
Ether (see specific product)
Ethyl acetate nat. ferment 85-88% dms. c.l. frt. alld lb. .14½- —
l.c.l., frt. alld ..... lb. .15½- —
tanks, frt. alld ..... lb. .12 • —
95-98% dms. c.l. frt. alld. lb. .14¾- —
l.c.l., frt. alld ..... lb. .15¾- —
tanks, frt. alld ..... lb. .12¼- —
99% dms., c.l., frt. alld. lb. .15 • —
l.c.l., frt. alld ..... lb. .16 • —
tanks, frt. alld ..... lb. .12½- —
syn., 85-88% dms. c.l., dlvd. lb. .14½- —
l.c.l., dlvd ..... lb. .15½- —
tanks, dlvd ..... lb. .12 • —
95-98%, dms., c.l., dlvd ... lb. .14¾- —
l.c.l. dlvd ..... lb. .15¾- —
tanks, dlvd ..... lb. .12¼- —
99%, dms., c.l., dlvd ..... lb. .15 • —
l.c.l., dlvd ..... lb. .16 • —
tanks, dlvd ..... lb. .12½- —
Acetoacetate dms., c.l., dlvd .. lb. .58½- —
lb. .58½- —
l.c.l., dlvd ..... lb. .59½- —
tanks dlvd ..... lb. .56 • —
Acrylate, dms., c.l., t.l., dlvd. lb. .36 • —
l.t.l. dlvd ..... lb. .37 • —
tanks dlvd ..... lb. .34 • —
Aminobenzoate USP (see Benzocaine)
Amyl keytone dms. c.l., dlvd lb. .20 • —
l.c.l. same basis ..... lb. .21 • —
tanks, same basis ..... lb. .17½- —
Benzoate, bots ..... lb. .74 • .90
Bromide tech. 98% dms., c.l., frt. alld. E.. lb. .44 • .46
l.c.l., frt. alld. E ..... lb. .46 • .48
tanks, frt. alld. E ..... lb. .41 • .43
Butyl ketone, dms., c.l., works. lb. .36 • —
tanks, works ..... lb. .34 • —
l.c.l. works ..... lb. .36¾- —
Butyrate, works ..... lb. .85 • .90
Carbamate (see Urethane).
Cellulose vis. 7 cps. bgs. 5,000-lb. lots or more works lb. .70 • —
smaller lots, works lb. .72 • .80
vis. 10, 20, 50, 100, 150 cps. bgs., 2,000-lb lots or more, works lb. .65 • .70
smaller lots, works lb. .67 • .81
Chloride, tech., cyl., works .... .20 • .22
dms., works ..... lb. .18 • .20
tanks, works ..... lb. .10 • —
Cinnamate cns ..... lb. 3.35 • 3.45
Ether, absolute, ACS, dms ..... lb. .27 • —
anesthesia USP hospitals, 1-lb. cns lb. 1.01 • —
½-lb cns ..... lb. 1.11 • —
¼-lb cns ..... lb. 1.21 • —
indust., dms., c.l., dlvd ..... lb. .12½- —
l.c.l., dlvd. E ..... lb. .13½- —
tanks, dlvd E. ..... lb. .10 • —
Gallate, dms., 100 to 2,000-lb. lots lb. 3.90 • 4.40
Iodide, cbys., works ..... lb. 3.30 • —
Methacrylate, dms., c.l., and less than truckload, works, frt. equald lb. .51½- .53
Morphine hydrochloride, USP, bots. oz.11.85 • —
Nitrite (see Nitrous ether).
Oenanthate, dms. ..... lb. 1.00 • 1.50
Oleate, dms. l.c.l., works ..... lb. No prices.
Oxalate (see Diethyl oxalate).
Silicate dist. (see Tetraethyl orthosilicate).
40% available SiO_2, dms., c.l., dlvd. lb. .44½- —
l.c.l., dlvd ..... lb. .45½- —
tanks, dlvd ..... lb. .42 • —
Ethylethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
l.c.l., dlvd E ..... lb. .44½- —
tanks, dlvd. E ..... lb. .41½- —
N-Etnyl-a-naphthylam'ne, dms., works, lb. 1.02 • —
N-Ethyl-o-toluidide, bbls. ..... lb. .88 • —
Ethylamine (see Mono, Di- or Tri-)
N-Ethylaniline dms. c.l., frt. alld. lb. .57 • —
l.c.l., frt. alld ..... lb. .58 • —
tanks, frt. alld ..... lb. .55 • —
Ethylbenzene, 99% dms., c.l., or t.l., frt. equald lb. .17 • —
l.t.l. same basis ..... lb. .18 • —
tanks, same basis ..... lb. .15 • —
Ethylene dichloride dms. c.l., dlvd. lb. .11½- —
l.c.l., same basis ..... lb. .12½- —
tanks, same basis ..... lb. .09 • —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Glycol, indust., dms., c.l., dlvd. E lb. .16 • —
l.c.l., same basis ..... lb. .17 • —
tanks, same basis ..... lb. .13½- —
Monobutyl ether, dms., c.l., dlvd. E lb. .22 • —
l.c.l., dlvd E ..... lb. .23 • —
tanks, dlvd. E. ..... lb. .19½- —
Monoethyl ether, dms., c.l., dlvd. E lb. .21 • —
l.c.l., dlvd. E ..... lb. .22 • —
tanks, dlvd. E ..... lb. .18½- —
Acetate, dms., l.c., dlvd. E. lb. .19½- —
l.c.l., dlvd E ..... lb. .20½- —
tanks, dlvd E ..... lb. .17 • —
Monomethyl ether, dms., c.l., dlvd. E lb. .21 • —
l.c.l., dlvd. E ..... lb. .22 • —
tanks, dlvd. E lb. .18½- —
Acetate, dms., l.c., dlvd. E. lb. .29 • —
l.c.l., dlvd E ..... lb. .29¾- —
tanks, dlvd. E ..... lb. .27 • —
Monostearate, triple pressed, dms lb. .33 • .35
Oxide, dms., c.l., dlvd E .... lb. .21½- —
l.c.l., dlvd. E ..... lb. .24½- —
tanks, dlvd. E ..... lb. .15½- —
Trichloride (see Trichloroethane).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 • —
l.c.l., dlvd. E., 100% basis lb. .43 • —
tanks, dlvd. E., 100% basis .lb. .40 • —

Mathieson

POLYETHYLENE GLYCOLS

are there

floods of suds

Dovetailing precisely with your most complex production schedules for soaps or surface active agents . . . meeting your most exacting requirements for consistent top quality . . . Mathieson polyethylene glycols are *there*. Poly-G's are shipped directly from the plant at Brandenburg, Kentucky, in Mathieson's fast-moving fleet of tank cars and tank trucks, and from local distributors' stocks in resin-lined drums.

And Mathieson technical assistance is there, too, whenever we can help you find new or more profitable applications for this versatile team of water soluble polyols. For further information or samples, call your Olin Mathieson representative or write today.

POLY-G 200 POLY-G 600
POLY-G 300 POLY-G 1000
POLY-G 400 POLY-G 1500
POLY-G B1530 (a blend of POLY-G 1500 and 300)

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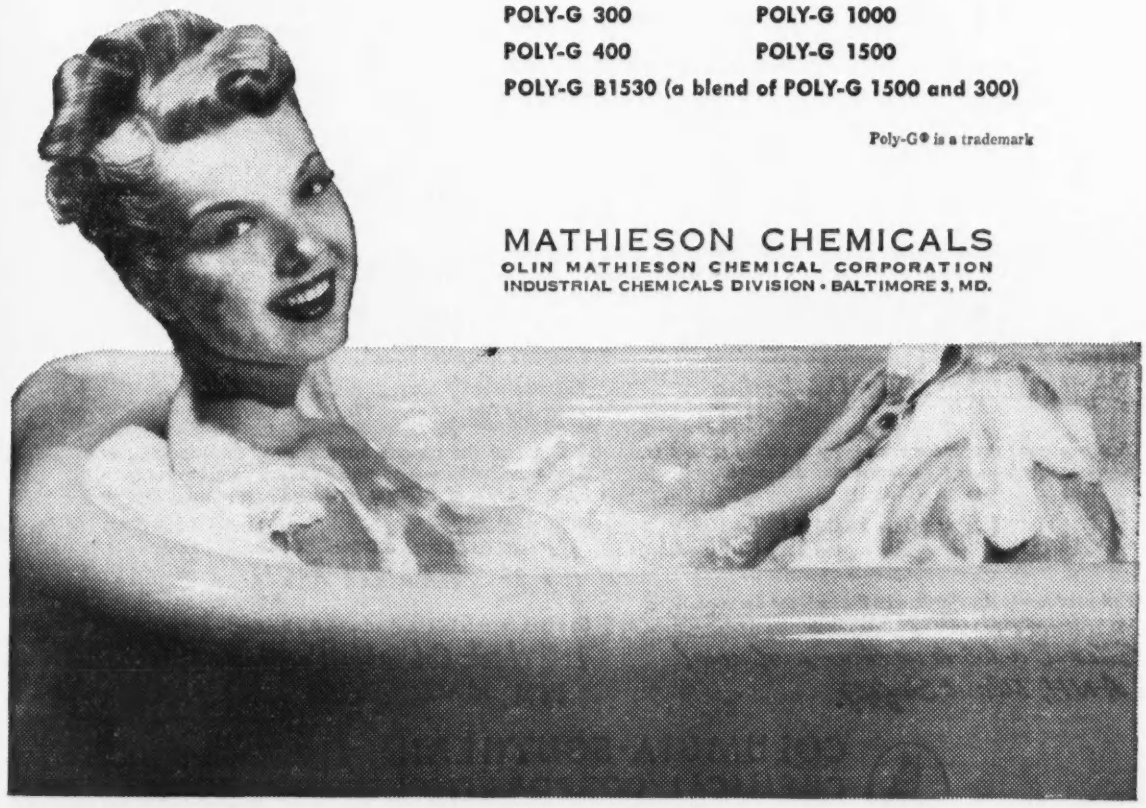

MATHIESON CHEMICALS
OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

4731

MATHIESON

INORGANICS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Potash • Caustic Soda • Chlorine • Hydrazine and Derivatives • Hypochlorite Products • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sulphate of Alumina • Sulphur (Processed) • Sulphuric Acid

ORGANICS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Surfactants

Ethylvanillin, cns., 25-lb. lots....lb. 7.65 - —
Eucalyptol, USP, cns., dms. .....lb. 1.25 - 1.40
Eugenol, USP, bots.....lb. 2.25 - 2.60
Euphorbia herb, bls.....lb. .15 - .17

F

Feldspar, 140-200 mesh, bulk, c.l., works..ton.19.50 - —
Feldspar in bags $3 per ton higher.
Fennel seed, Argentine, bgs.....lb. .13½- —
Czech, medium, bgs.....lb. .09 - —
Indian, light, bgs.....lb. .15½- —
Roumanian, bgs.....lb. .09 - —
Fenugreek seed, Indian, bgs.....lb. .08½- .09
Moroccan, bgs.....lb. .08½- .09
c.l., works lb. .09 - —
l.c.l., works .....lb. .09¾- —
soln., USP IX, chys.....lb. .16 - —
djns. .....lb. .17 - —
Ferric acetate liquor, 28°, bbls., Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works .... 100 lbs. 7.85 - —
indust. cryst. bbls. c.l. works. 100 lbs. 5.25 - 6.75
l.c.l. works .... 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade tanks, frt. equald. 100% basis. 100 lbs. 3.75 - —
USP cryst. dms. works lb .07½- .09
Citrate, gran., dms .....lb. .88 - —
Hypophosphite, NF dms.....lb. 3.45 - —
Naphthenate liq. 6% Fe, dms., frt. alld lb. .25¾- —
Oxalate gran. dms lb. .85 - .87
Oxides (see oxides under Black, Brown, Red, and Yellow.)
Phosphate NF, soluble, gran., pearls cs lb. .64 - .65
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb lots lb. .40½- —
Resinate, 6¾% Fe., dms., frt. alld lb. .29½- —
Stearate, dms., c.l., frt. alld. lb. .39 - —
l.c.l., frt. alld.....lb. .40 - .44
Sulfate, partly hydrated, bgs., c.l., works..ton.35.25 - —
l.c.l., works .....ton.36.25 -42.25
bulk, c.l., works.....ton.33.25 - —
Ferric-ammonium citrate, brown, pearls, NF gran., dms lb. .63 - .68
green pearls, USP XII, gran., dms lb. .66 - .69
Oxalate fine gran., dms lb. .25½- .28½
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28½
Ferrous gluconate, NF, dms.....lb. .94 - —
Sulfate, gran., bgs., c.l., works, ton.34.50 - —
l.c.l., dlvd. Metropolitan area..100 lbs. 3.35 - 4.25
bbls., c.l., works.....ton.40.00 - —
bulk, c.l., works.....ton.27.00 - —
USP, cryst., bbls., dms.....lb. .09½- .10
Fir, balsam, Canada, cns.....gal.32.00 -35.00
Oregon, bbls.....gal. 3.75 - 4.00
Fishliver oil (see Oil fishliver).
Fishmeal, dom., menhaden, 60% protein grd, bgs., Chesapeake Bay area ton.140.00 - —
scrap, same basis..ton.137.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, 37%, (inhibited, 7 to 8% methanol) USP, dms., c.l., dlvd lb. .0713- —
tanks, dlvd .....lb. .0450- —
(12 to 15% methanol), USP, dms., c.l., dlvd lb. .0740- —
tanks, dlvd .....lb. .0475- —
(uninhibited, methanol-free), tanks, dlvd lb. .0420- —
Fringetree bark, bls lb .60 .61
Fullers' earth bgs. c.l. Ill. mines, ton.19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines ton.17.50 - —
calcined, bgs. c.l., same basis ton.20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh bgs. c.l., same basis ton.17.50 -18.00
spent, bgs. c.l. shipt point ton 4.50 5.00
Furfural, dms., c.l., works .....lb .13 - —
l.c.l., works .....lb. .14 - —
tanks, dlvd E .....lb. .12 - —
dlvd. W .....lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
l.c.l., dlvd .....lb. .19 - —
tanks, dlvd .....lb. .15½- —
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls. l.c.l .....lb. .45½- —
No. 3, bbls., l.c.l.....lb. .43½- —
liq., No. 1, bbls., l.c.l.....lb. .22½- —
No. 2, bbls., l.c.l.....lb. .21½- —
No. 3, bbls., l.c.l.....lb. .19 - —
solid, No. 1, bxs., l.c.l.....lb. .45 - —

G

G salt, bbls., frt. alld, 100% basis.lb. .73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l lb. .53 - —
150 Bloom test, bbl., c.l. lb. .64 - —
200 Bloom test, bbls., c.l lb. .70 - —
225 Bloom test, bbls., c.l lb. .73 - —
275 Bloom test, bbl., c.l lb. .81 - —
Gelsemium root, bls .....lb. .26 - —
Gentian root, bls. .....lb. .23 - —
grd., bbls., bxs.....lb. .27 - —
powd. bbls., bxs .....lb .27 - —
Geraniol, extra, cns., dms.....lb. 3.60 - 3.90
standard, cns., dms.....lb. 3.30 - 3.60
Geranyl acetate, cns.....lb. 3.30 - 3.60
Ginger oleoresin NF from African root, bots lb 4.00 7.75
from Jamaican root, bots lb 6.00 -10.25
Root, African, bls. .....lb. .33 - —
Cochin, bgs.....lb. .26½- —
Jamaican, No. 2, bgs.....lb. .76 - —
No 3 bgs. .....lb. .75 - —
Nigerian, split, bgs.....lb. .28 - —
Glauber's salt anhyd (see Sodium sulfate)
Glue, bone, extracted, dry bone, 80 jellygrams bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
green, 40 jellygrams, bgs., c.l., dlvd..lb. .13½- —
65 jellygrams, same basis lb. .13¾- —
86 jellygrams, same basis lb. .14 - —
115 jellygrams, same basis lb. .14½- —
135 jellygrams, same basis lb. .15 - —
164 jellygrams, same basis lb. .16 - —
Glue, bone, green, 180 jellygrams, same basis..lb. .17 - —
200 jellygrams, same basis lb. .18½- —
Bone glue, l.c.l. prices 1c. higher.
Hide, 70-94 jellygrams, bgs., c.l., dlvd..lb. .15 - —
95-121, bgs., c.l., dlvd..... lb. .16 - —
122-149, bgs., c.l., dlvd.....lb. .18½- —
150-177, bgs., c.l., dlvd.....lb. .21 - —
178-206, bgs., c.l., dlvd.....lb. .23½- —
207-236, bgs., c.l., dlvd.....lb. .26 - —
237-266, bgs., c.l., dlvd.....lb. .29 - —
267-298, bgs., c.l., dlvd.....lb. .30 - —
299-330, bgs., c.l., dlvd.....lb. .32 - —
331-362 bgs, c.l., dlvd.....lb. .34 - —
363-394, bgs., c.l., dlvd.....lb. .36 - —
395-427, bgs., c.l., dlvd.....lb. .38 - —
428-460, bgs., c.l., dlvd.....lb. .40 - —
461-494, bgs., c.l., dlvd.....lb. .42 - —
495-529, bgs., c.l., dlvd.....lb. .43 - —
Hide glue l.c.l. prices 1c. higher.
l-Glutamine, bots. .....gram. .65 - —
Glycerine, nat., crude, saponification, 88%, to refineries, tanks...lb. .16½- .18¾
soaplye, 80%, tanks.....lb. .15 - .16¾
refd., CP, USP 99% dms., c.l., dlvd lb. .29½- —
l.c.l., dlvd .....lb. .29⅞- —
tanks, dlvd.....lb. .27⅞- —
96%, dms., c.l., dlvd.....lb. .28½- —
l.c.l., dlvd.....lb. .29 - —
tanks, dlvd.....lb. .27 - —
high gravity, dms., c.l., dlvd. lb. .29¼- —
l.c.l., dvid .....lb. .29¾- —
tanks, dlvd.....lb. .27¾- —
yellow dist., c.l. .....lb. .28½- —
l.c.l., dlvd. .....lb. .29 - —
Glycerine, syn., dms., c.l., dlvd..lb. .29½- —
l.c.l., dlvd. .....lb. .30 - —
tanks, dlvd .....lb. .28 - —
Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30%, dms., c.l., works..lb. .20½- —
l.c.l., works.....lb. .21¼- —
tanks, works.....lb. .18 - —
Golden seal root, NF, tested, bls. lb. 3.85 - —
Graphite, amorph., powd., bgs., fib. dms., ex whse..lb. .06 - .09½
crystalline, 88-90%, powd., bgs., fib. dms., ex whse..lb. .19 - .21½
90-92% powd., bgs., fib. dms., ex whse..lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse..lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse..lb. .29 - .31
No. 2, 90-95%, bgs., fib. dms., ex whse..lb. .29 - .31
Grease, white, choice, all hog tanks, dlvd..lb. .08⅝- .08¾
yellow, tanks, dlvd.....lb. .06⅞- .07
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb. 5.10 - —
tungstated, PTMA kgs., works, lb. 6.40 - —
Green, chrome, CP, dark, light, medium blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - .42
16-30%, bbls. same basis.lb. .40 - .42
31-45%, bbls., same basis lb. .41 - .43
45-49%, bbls. same basis lb. .44 - .46
color, 25% lb. .19 .20
Chrome green prices are ½c. higher dlvd. at the following points, except as noted:—Ala., Fla., Ga., La (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld. lb. 1.20 - —
pure, bgs. c.l., frt. alld.... lb. 44¾- —
l.c.l. same basis ..... lb. 45½- —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb. 5.30 - —
Paris (see Paris green)
Phthalocyanine toner, bbls, works, lb. 3.95 - —
resinated, bbls .....lb 3.50 - —
water dispersable, bbls ..lb 1.71 - —
Pigment B, kegs .....lb 1.35 - —
Grindella robusta herb, bls. ....lb. .45 - —

A new type of weather-resistant alkyd resin—made from isophthalic acid and *Glycerine*—is now being offered in experimental quantities.

The stability and compatibility of Glycerine as a polyol in surface-coating alkyds and its low MW/Hydroxyl ratio, have for years made a wide range of resin properties feasible.

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Here again, *nothing takes the place of Glycerine.*

This balanced group of properties keeps Glycerine's usefulness growing

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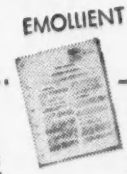

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☐ 16-page booklet on Glycerine properties and applications

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Guaiacol NF, cryst., dms., tins	lb.	2.10	- 2.15
liq., chys., dms	lb.	2.30	- 2.40
Carbonate NF VII, dms	lb.	3.40	- 3.45
Gum aloe (see Aloe).			
Arabic, amber, sorts, bgs	lb.	.21	- .23
powd., USP, bbls	lb.	.27	- .29
Asafetida (see A).			
Asphaltum (see A).			
Benzoin, Sumatra, cs	lb.	.33	- —
Camphor (see C).			
Cellulose, high vis., bgs., 23,000-lb lots or more, works, frt. alld	lb.	.55	- —
smaller lots, same basis	lb.	.57	- —
Copal, Congo, No. 1, bgs	lb.	.24	- .26
No. 2, bgs	lb.	.18½	- .20
No. 3, bgs	lb.	.15¾	- .17
Manila, C, bgs	lb.	.34¾	- .38
CBB, bgs	lb.	No stocks	
DBB, bgs	lb.	.25½	- .28
DK, bgs	lb.	No stocks	
dust., bgs	lb.	.14	Nom.
MA, soft, bgs	lb.	.19¾	- .22
WS, bgs	lb.	No stocks	
Philippine, pale, chips, bgs	lb.	.25½	- .28
nubs, bgs	lb.	.32½	- .36
seeds, bgs	lb.	.20	Nom.
sorts, bgs	lb.	.23½	- .26
Pontianak, chips, bgs	lb.	.26	- —
nubs, bgs	lb.	.37	- .40
Dammar, Batavia, a/E, cs	lb.	No stocks	
dust, bgs	lb.	.16	Nom.
E, bgs	lb.	.20	Nom.
Gum, dammar, East India, batu, bold, bgs	lb.	.13¾	- .15
nubs and chips, bgs	lb.	.08¼	- .09½
black, bold, bgs	lb.	.14½	- .16½
unscraped, bgs	lb.	.12	- .13½
nubs and chips, bgs	lb.	.11½	- .13
pale, chips, bgs	lb.	.13	- .15
nubs, bgs	lb.	.17¾	- .20
Siam, cs	lb.	.37½	- .40
Singapore, No. 1, bgs	lb.	.44¼	- .47
No. 2, bgs	lb.	.32	- .34
No. 3, bgs	lb.	No stocks	
dust, bgs	lb.	.17	- .19
seeds, bgs	lb.	No stocks	
Ester, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va	lb.	.14½	- .16
Wood-rosin type, dms., c.l., same basis	lb.	.15	- .16
Guar, food grade, bgs	lb.	.50	- —
tech. grade, bgs	lb.	.40	- —
Karaya, No. 1, NF, powd., bbls	lb.	.48	- .50
No. 2, powd., bbls	lb.	.35	- .38
No. 3, powd., bbls	lb.	.32	- .35
Locust bean, powd., bgs	lb.	.50	- —
Myrrh, cs	lb.	.55	- —
Opium (see Opium).			
Olibanum siftings, cs	lb.	.20	Nom.
tears, cs	lb.	.22	.30
Rosin (see Naval Stores, Protective Coatings Market).			
Sterculia (see Gum Karaya).			
Gum, tragacanth, No. 1, ribbons, cs	lb.	4.50	- 4.70
No. 2, cs	lb.	3.50	- 3.75
No. 3, cs	lb.	3.25	- 3.40
powd., USP, bbls	lb.	1.25	- 1.36
Gypsum, plaster of paris, 100-lb. paper, bgs, trucks, dlvd. N Y C	ton.	20.30	- —
Terra alba, dom., paper bgs., same basis	ton.	20.00	- —
works, N. Y. C	ton.	17.00	- —
imp., English, 100-lb. paper bgs., ex dock, N. Y. C	ton.	55.00	- —
ex warehouse	ton.	60.00	62.00

H

Hawthorn berries, bgs	lb.	.21	- —
Heliotropin, 100-lb. lots, dms	lb.	3.00	- 3.25
Hellebore root, dom., green bls	lb.	.70	75
Helonias root, bls	lb.	1.75	2.00
Hematine extract, cryst., No. 1, bbls., l.c.l	lb.	.47	- —
No. 2, bbls., l.c.l	lb.	.43	- —
No. 3, bbls., l.c.l	lb.	.41	- —
No. 4, bbls., l.c.l	lb.	.39	- —
No. 5, bbls., l.c.l	lb.	.37	- —
paste, No. 1, bbls., l.c.l	lb.	.20½	- —
Henbane leaves, bls	lb.	.35	- .40
Heptane, indust., tanks, Bayonne, N. J	gal.	.20	- —
Baytown, Tex	gal.	.16¼	- —
Borger, Tex	gal.	.16¼	- —
Hesperidin, purif., 25 lb. lots, f.o.b., works	lb.	8.95	- —
Methylchalcone, bots., 50-lb lots, works	lb.	22.50	- —
5-lb. lots, works	lb.	23.00	- —
1-lb. lots, works	lb.	23.50	- —
Hexachlorophene, dms	lb.	1.94	- —
Hexalin (see Cyclohexanol).			
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N.Y.C.	lb.	.233	- —
1,000-19,999-lb lots, same basis	lb.	.243	- —
smaller lots, same basis	lb.	.253	- —
5lb dms., 1,000-lb lots or more, same basis	lb.	.250	- —
smaller lots, same basis	lb.	.253	- —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. N. Y. C. and Philadelphia	lb.	.42½	- —
smaller lots, same basis	lb.	.43½	- 48½
Hexane, indust., tanks, Bayonne, N. J	gal.	.20	- —
Baytown, Tex	gal.	.17	- —
Borger, Tex	gal.	.17	- —
1-Hexanol, dms., c.l., works	lb.	.35	- —
l.c.l., works	lb.	.35¾	- —
tanks, works	lb.	.33	- —
Hexyl cinnamic aldehyde, dms	lb.	4.00	7.50
Salicylate, dms	lb.	1.75	- —
Hexylene glycol, dms., c.l., dlvd	lb.	.17	- —
l.c.l., dlvd	lb.	.18	- —
tanks, dlvd	lb.	.14½	- —
n-Hexyl methacrylate, dms., less than truckload works	lb.	.71	- —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd	lb.	14.00	- —
smaller lots, dlvd	lb.	14.50	- —
Homatropine hydrobromide, USP bots	oz.	5.50	- —
Methylbromide, USP, bots	oz.	3.90	- —
Hoofmeal 17-18% ammonia, bulk, c.l., Chicago	unit-ton.	6.25	- —
Horehound herb, bls	lb.	.16	- .19
Hydrastis (see Goldenseal)			
Hydrazine free base, ret. dms., works	lb.	No stocks.	
Hydrate, 85%, ret. dms., works	lb.	1.35	1.55
100%, ret. dms., works	lb.	1.60	1.90
Hydrocortisone acetate bulk, bots., up to 500 gms	gm.	4.75	- —
Alcohol, bulk, bots., up to 500 gms			
Hydrofuramide dms, fib. ctns., works	lb.	.30	- .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works	lb.	.45	- —
l.c.l., works	lb.	.55	- .60
Fluoride anhyd., cyls., dlvd. E	lb.	.30½	- .32½
dlvd W	lb.	.39	- —
tanks, works	lb.	.21	- —
Peroxide, USP bbls., dlvd	lb.	.63¾	- .65
35%, dms., c.l., dlvd	lb.	.202	- —
l.c.l., dlvd	lb.	.211	- —
tanks, dlvd	lb.	1800-	- —
gms	gm.	4.75	- —
Hydroquinone, photo grade, bbls., dms	lb.	1.03	- 1.06
tech., dms., c.l., dlvd	lb.	.82½	- —
l.c.l., dlvd	lb.	.84½	- —
Hydroxycitronellal, cns	lb.	6.00	7.45
Hyoscine salts (see Scopolamine)			
Hyoscyamine hydrobromide, bots.	oz.	6.00	- 7.00
Sulfate, bots	oz.	6.75	- 7.25
Hypernic extract, cryst., No. 2, bbls., l.c.l	lb.	.52	- —
liq., No. 1, bbls., l.c.l	lb.	.35	- —
No. 2, bbls., l.c.l	lb.	.27	- —

I

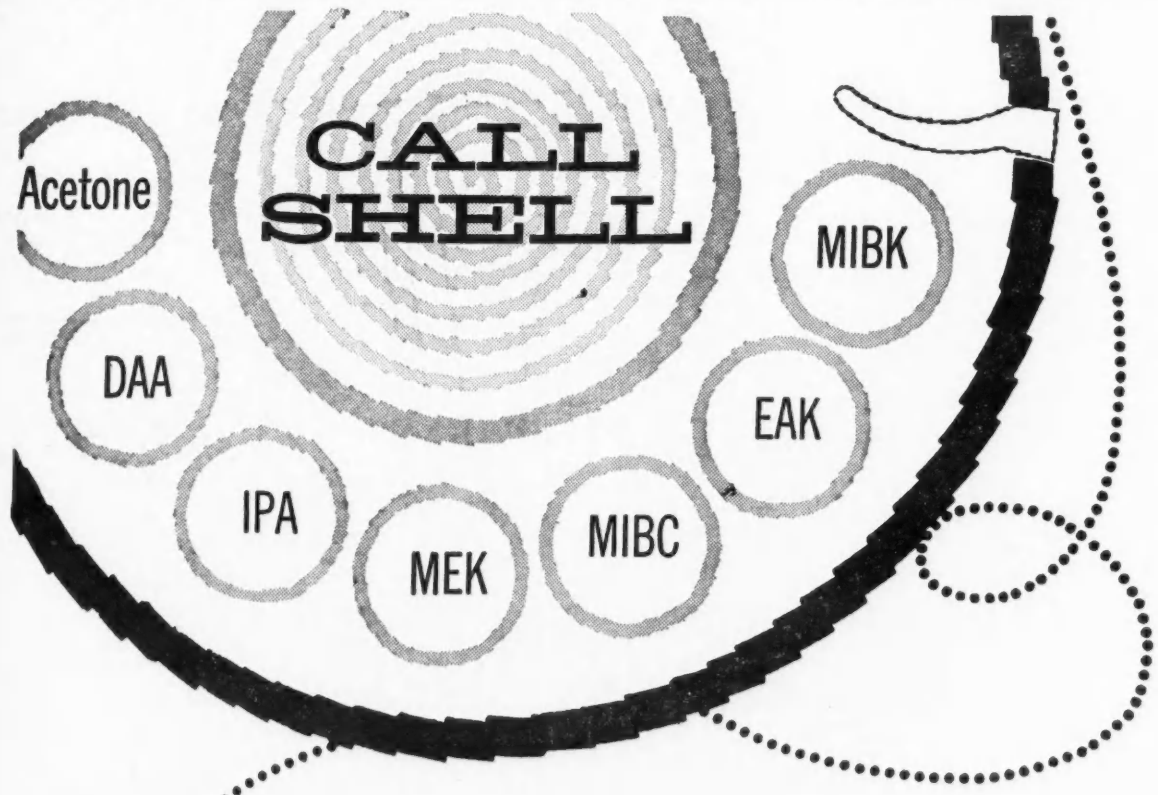
Ichthammol, NF, jars	lb.	.75	- 2.57
Indian red (see Red, Indian).			
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).			
Indole, CP, bots	lb.	16.50	-21.00
Inositol, bots., dlvd	lb.	5.00	- —
dms., dlvd	lb.	4.50	- 4.75
Insect flowers (see Pyrethrum).			
Iodine, crude, kgs	lb.	1.10	- —
resub., USP, dms., jars	lb.	2.30	- 2.32
Iodochlorohydroxyquinolin, USP, dms	lb.	5.90	- —
Iodoform, NF, dms., kgs	lb.	4.90	- 5.00
a-Ionone, cns	lb.	5.25	- 5.40
b-Ionone, cns	lb.	5.40	- 5.70
Ipecac root, bgs., whole	lb.	7.50	- —
powd., bbls., bxs	lb.	7.85	- —
Irish moss, bleached, prime, bls	lb.	.28	- .34
Iron compounds (see Ferric or Ferrous).			
Oxides (see under Black, Brown, Red, and Yellow).			
Isoborneol, cns	lb.	1.25	- 1.70
Isoborny acetate, cns	lb.	.46	- .70
Formate, dms	lb.	.80	- —
Propionate, dms	lb.	1.15	- 1.45
Isobutyl acetate, perfume grade, cns	lb.	.75	- 1.00
solvent grade, dms., c.l., dlvd. E. of Rockies	lb.	.14¾	- —
l.c.l., same basis	lb.	.15¾	- —
tanks, same basis	lb.	.12¼	- —
Isobutyraldehyde, CP, dms., c.l., dlvd.	lb.	.27½	- —
l.c.l., dlvd	lb.	.28½	- —
tech., dms., c.l., dlvd	lb.	.21½	- —
l.c.l., dlvd	lb.	.22½	- —
tanks, dlvd	lb.	.19½	- —
Isoeugenol, cns	lb.	3.60	4.40
Isoniazid, powd., bulk, 25-kilo lots or more	kilo.	23.00	-25.50
smaller lots	kilo.	24.00	-26.00
Isopentane, coml. grade, tanks, f.o.b. Tex, refy	gal.	.15½	- —
Isonicotinic acid hydrazide (see Isoniazid).			
Isophorone, dms., c.l., works	lb.	.24½	- —
l.c.l., works	lb.	.25¼	- —
tanks, works	lb.	.22½	- —
Isopropanol (see Alcohol, Isopropyl).			
Isopropyl acetate, dms., c.l., dlvd.	lb.	.13½	- —
l.c.l., same basis	lb.	.14½	- —
tanks, same basis	lb.	.11	- —
Alcohol (see Alcohol, Isopropyl).			
Benzene (see Cumene).			
Ether, dms., c.l., dlvd	lb.	.07	- —
l.c.l., dlvd	lb.	.08	- —
tanks, dlvd	lb.	.05	- —
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works	lb.	.70	- —
l.c.l., works	lb.	.714	- .814
Isopropylamine (see Mono, Di, or Tri-).			
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works.	lb.	.75	- —
l.c.l., works	lb.	.80	- .90
Isoquinoline, dms., works	lb.	.65	- 1.25

J

Jalap root, NF, bls	lb.	NP	- —
powd., bbls., bxs	lb.	NP	- —
Juniper berries, bgs	lb.	.18	- .20
Tar, NF, dms	lb.	.42	- .60

K

Kaolin (see also Clay, China).			
NF, powd., fib., dms	lb.	.10	- .12
colloidal, fib., dms	lb.	15½	- 17¼
Kola nuts, bgs	lb.	.15	- —



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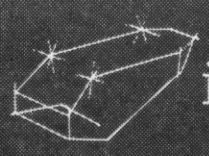
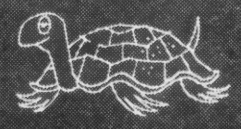
Lactose  is slow to ferment, 

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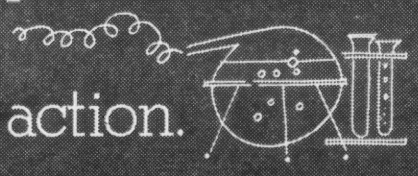
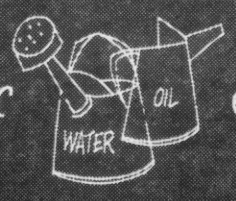


action. Acts as a superior 

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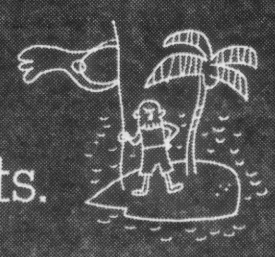

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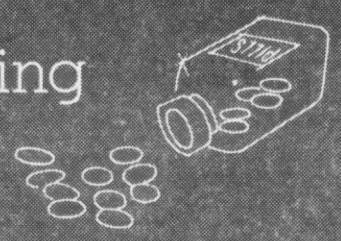
filler and coating 

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L

Lactose, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
6,000-lb. lots, frt. equald ... lb. .14½- —
2,000-lb. lots, frt. equald ... lb. .14¾- —
200-lb. lots, frt. equald ... lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
fermentation grade, bgs., c.l., works lb. .08½- —
USP fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
2,000-lb. lots, frt. equald lb. .22¼- —
200-1,800-lb. lots, frt. equald lb. .22¾- —
USP lactose in bgs., ½c. to 1c. lower.
Ladyslipper root, bls ... lb. Nom. —
Lanolin, cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works ... lb. .24 - .26
hydrous, dms., works ... lb. .23 - .25
Lard, cash, dms., Chicago ... lb. .1465 Nom.
Larkspur seed, bgs ... lb. .25 - —
n-Lauryl methacrylate, dms., c.l. or t.l. works lb. .65½- —
Lavender flowers, medium, bls lb. .75 - .80
ord., bls ... lb. .25 - .40
select, bls lb. .90 - —
Lead acetate, white, cryst., bbls. lb. .25½- —
gran., bbls ... lb. .26½- —
powd., bbls ... lb. .26½- —
NF, cryst., gran., powd. ... lb. .36½- —
Arsenate, acid powder, dealers, 3-lb bgs or larger, c.l., frt alld on 96 lbs. or more lb. .27½- —
t.c.l., frt. alld ... lb. .28½- —
1-lb. bgs., c.l. ... lb. .41½- —
t.c.l. ... lb. .42½- —
Blue, basic sulfate, bbls., c.l., shipt. point, frt. alld lb. .17¼- —
t.c.l. same basis ... lb. .18¼- —
Carbonate (see Lead, white, basic carbonate).
Chloride, dms lb. .45 - —
Iodide NF V jars ... lb. 3.82 - —
Linoleate fused, 26%% Pb, dms. lb. .33 - —
Metal pigs, prime, N. Y. ... lb. .16 - —
St Louis ... lb. .1580 -
Monosilicate, bgs., c.l., works, frt. equald lb. .20 - —
t.c.l. same basis lb. .2075- —
Naphthenate, liq., 16% Pb., dms., dlvd lb. .17 - —
24% Pb. dms., dlvd lb. .21 - —
solid, 37% Pb., dms., dlvd lb. .27½- —
Nitrate, bbls lb. .23¾- —
Orthosilicate-silica gel, 50-60% PbO dms. works lb. .29¾- .34¼
Peroxide tech. powd. bbls lb. .38¾- .40¼
Phthalate, dibasic, dms., works lb. .41 - —
Red 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld lb. .19 - —
t.c.l., same basis ... lb. .20 - —
97% Pb_3O_4, bbls., c.l., same basis. lb. .192 - —
t.c.l., same basis ... lb. .202 - —
95% Pb_3O_4, bbls., c.l., same basis. lb. .1935- —
t.c.l., same basis ... lb. .2035- —
Resinate, precip., 23% Pb, dms., dlvd lb. .32½- —
Salicylate, normal, dms., works lb. .46 - —
Silicate (see Lead, white, basic, silicate)
Sulfate (see Lead, blue, basic sulfate Lead white, basic sulfate)
Tallate, liq., 16% Pb, dms. ... lb. .15 - —
24% Pb., dms ... lb. .18½- —
solid 30% ... lb. .23¼- —
White, basic, carbonate, bgs, c.l., shipt. point, frt. alld ... lb. .19 - —
t.c.l. same basis ... lb. .20 - —
Silicate, bgs., c.l., shipt. point frt. alld ... lb. .17¼- —
c.l., same basis ... lb. .18¼- —
sulfate bgs. c.l. shipt. point, frt. alld lb. .17¼- —
t.c.l., same basis ... lb. .18¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works lb. .14 - .15
t.c.l., same basis ... lb. .16 - .17
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
t.c.l., same basis ... lb. .15 - .16
Lemon bioflavonoid complex, 25-lb. lots, works lb. 9.00 - —
dl-Leucine, dms., works ... lb 12.25 -15.00
Licorice root, whole, bbls. ... lb. .10 - .12
gran., bbls ... lb. .15 - .17
powd., bbls ... lb .12 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
t.c.l. works lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan N. Y. destination, freight equalized with nearest producing point ton.20.82 - —
Hydrated, bulk, c.l., same basis ton.22.32 - —
Spray, bgs., c.l., same basis. ton.26.32 - —
Lime salts (see Calcium).
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).
Limestone grd., bgs., works ton 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 3.65 - 4.80
ex lignaloe wood oil, dms lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 3.30 - 5.10
96-98% dms ... lb. 4.05 - 6.75
ex petitgrain, bots ... lb. 4.80 - 5.90
Lindane, 25% formulation, dealers, dms., frt. alld lb. 1.58 - 1.69
99% tech. formulators, dms., frt. alld lb. 2.65 - 3.25
Linden flowers with leaves, bls lb. .25 - —
without leaves, bls ... lb. .30 - —
Linseed meal, expeller, 32-34% bulk, Midwest, mills ton.57.50 - —
extracted, 36% bulk same basis. ton.54.00 -55.00
Litharge, comi., powd., bbls., c.l., works, frt. equald lb. .18 - —
t.c.l., same basis ... lb. .19 - —
Lithium benzoate, dms. lb. 1.65 - 1.67
Bromide NF dms., works, frt. equald lb. 2.60 - —
Carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29¼- —
ton lots to t.l., dlvd lb. 1.30 - —
tech., dms., c.l., t.l., dlvd., frt. alld. works ... lb. .82 - —
t.c.l., same basis ... lb. .85 - 1.11½
Chloride, CP, anhyd., ton lots lb. 1.23½- —
tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld lb. 1.00 - 1.05
t.c.l. same basis ... lb 1.05 - 1.05½
Citrate, NF, dms ... lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd. lb. 2.17½- —
ton lots, dlvd ... lb 2.18½- —
less ton lots, dlvd ... lb. 2.23½- —
Hydride powd., dms., 500-lots, works. lb.10.50 -12.50
Lithium hydroxide, monohydrate, dms., dlvd. lb. .78 - —
Manganite, dms., works ... lb. .93 - 1.15
Nitrate, tech., dms., 100-lb. lots. lb. 1.25 - —
Salicylate, dms. ... lb. 1.60 - 1.70
Silicate, dms., works ... lb. 1.10 - 1.30
Stearate, dms., c.l., works ... lb. .47½- —
ton lots, works ... lb. .48½- —
less-ton lots, works ... lb. .53½- —
Sulfate, dms., 100-lb. lots ... lb. 1.15 - —
Titanate dms. works ... lb. 1.15 - 1.35
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08 - —
t.c.l., dlvd. E ... lb. .08¾- —
titanated (high-strength), bgs., c.l., dlvd ... lb. .10 - —
t.c.l., dlvd ... lb. .11 - —
Lobelia herb bls ... lb. 1.50 - —
Lobeline sulfate, bots., works oz.37.50 -38.50
Logwood extract, cryst. No 1, bbls., t.c.l lb. .41 - —
No. 2, bbls., t.c.l. ... lb. .39 - —
liq., No. 1, bbls., t.c.l. ... lb. .20 - —
No 2, bbls., t.c.l ... lb. .19 - —
No 3, bbls., t.c.l. ... lb. .18½- —
solid No 1, boxes, c.l. ... lb. .35 - —
Lycopodium, cs ... lb. 3.00 - 3.50
dl-Lysine monohydrochloride, fib. dms lb.12.00 - —
l-Lysine, fib. dms ... lb.12.00 -13.00

M

Mace, Siauw, siftings, bls ... lb. 3.25 - —
West Indian, No. 1, bls. shipment lb. 3.25 - —
Magnesia, calcined, tech., bgs., etns, frt. equald ... lb. .25¾- .26½
syn. rubber grade, light, bgs., c.l., frt. equald lb. .29¾- .30½
extra light, bgs., c.l., frt. equald lb. .29¾- —
t.c.l. ... lb. .30½- —
USP, light, bgs ... lb. .36½- .37½
heavy, fib. dms ... lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewelah, Wash. ton.43.00 - —
Magnesium bromide, cases, jars lb. .95- 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½- —
t.l., frt. equald ... lb. .11 - —
l.c.l., frt. equald ... lb. .12½- .13½
USP, bgs., c.l., frt. equald ... lb. .13 - —
t.l., frt. equald ... lb. .13½- —
l.c.l., frt. equald ... lb. .14½- .15½
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾- —
l.c.l., works ... lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton.55.00 - —
t.c.l., works ... ton.65.00 -80.00
Gluconate, dms., cns ... lb. 1.34 - 1.41
Hydroxide, NF, powd., bbls., dms., kgs. lb. .23½- .27
Magnesium metal, 99.8% ingots, 10,000 lb. lots or more, works. lb. .36 - —
pigs, 10,000-lb. lots or more, works. lb. .35¼- —
sticks, cs., works, frt. alld. on carlots lb. .59 - —
Oxide (see Magnesia, calcined).
Nitrate, cryst., dms., works lb. .99 - —
Peroxide, 15%, dms., works ... lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls. lb. .75 - —
Silicate (see Talc).
Silicofluoride, dms., works lb. .10½- .12
Sulfate, tech., bgs., c.l., works, 100 lbs. 2.15 - —
t.c.l. works ... 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l. 5,000 lbs., 1 withdrawal. 100 lbs. 3.10 - —
smaller lots ... 100 lbs. 3.35 - —
Trisilicate, USP, dms., 5,000-lb. lots. lb. .38 - —
1,000-lb. lots ... lb. .40 - —
100-lb. lots ... lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher
Malathion dms., c.l., works ... lb. .90 - —
t.c.l., works ... lb. .92 - 1.02
Maleic anhydride, dms., c.l., dlvd. E lb. .28½- —
t.c.l., dlvd. E ... lb. .29½- —
tanks, dlvd. E ... lb. .27½- —
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root bls ... lb. .55 - .60
Manganese acetate, bbls., dlvd. lb. .35 - —
Arsenate, bgs ... lb. .16 - —
Borate, tech., fib. dms ... lb. .22 - —
Carbonate, bbls., works ... lb. .22 - —

How chemical buyers benefit from the service of distributors

Simplified purchasing

Your distributor of DuPont Methanol, Urea and other quality DuPont chemicals is a convenient, single source of supply for most . . . if not all . . . of your chemical requirements. He represents many of the leading chemical manufacturing firms . . . and carries their most widely used products. The result—a *single* phone call, a *single* purchase order answers your chemical needs! Through the use of a single source, you eliminate the overhead of costly bookkeeping and placing multiple orders with a number of vendors.

POLYCHEMICALS

Manganese chloride, anhyd., dms., works lb. .25½ - —
Dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net, works ton.148.00 - —
paper bgs., works ton.144.50 - —
dms., works ton.152.50 - —

Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher

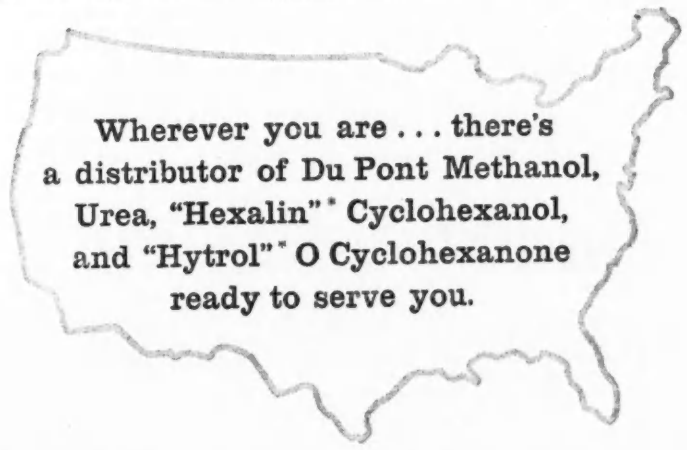
Gluconate, dms lb. 1.80 - 1.94
Hydrate, bbls., dlvd lb .36 — —
Hypophosphite, NF, dms lb 3.52 — —
Linoleate, liq., 4.35% Mn, dms. lb. .32½ - —
solid, precip., 8.2% Mn, bbls lb. .37½ - —
Naphthenate, liq., 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn. dms. lb .24 - —
precip. 6½-7% Mn dms lb 28 - —
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd S.E ton.88.53 - —
t.c.l. dlvd S E ton.95.55 - —
Tallate 6% dms lb 24 — —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton.62.00 - —
So. American 30% tannin, c.l., ex dock ton.54.00 -57.00
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
dms., to ton lots, works lb. .62 - —
single dm., works lb. .65 - —
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .30 - —
t.c.l., works lb. .31 - —
Menadione USP bots gram 044 - 05
Menthol, nat., USP, Brazilian, cs. lb. 6.35 - 6.50
syn., USP, racemic, cns lb. 4.75 - —
Methyl salicylate, tins lb 4.00 4.25

2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .42 - —
less ton lots, same basis lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .52 - —
less ton lots, same basis lb. .54 - —
Mercuric chloride NF, cryst., dms., 50-lb lots or more lb 4.98 - —
gran. or powd., dms., 50-lb. lots or more lb 4.78 - —
Cyanide, NF, VIII, powd., fib. dms. lb. 6.84 - —
Iodide red NF fib dms lb 7.72 - —
Oxide, red, NF powd., fib. dms lb 5.97 - 6.01
Yellow, tech. (see Yellow mercury oxide).
USP, fib dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate USP)
Metal, 76 lb per flask net-flask 255.00 -257.00
Mesityl oxide dms. c.l., dlvd lb. .14 - .14½
l.c.l., dlvd lb. .15 - .15½
tanks, dlvd lb. .11½ - .12
Meta-aminophenol (see m-Aminophenol)
Metachloroaniline (see m-Chloroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metanitroaniline (see m-Nitroaniline)
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks frt. alld gal. .75 - —
syn., Zone 1, dms. c.l. dlvd. or truckload min. frt. alld. gal. .48½ - —
t.c.l. works gal. .55½ - —
tankwagon, 2,000-4,000 gal. lots, dlvd Metropolitan area gal. .33½ - —
4,000 gal. min., frt. alld or dlvd gal. .32½ - —

Methanol, tankwagon, 4,000 gal. min., works, Carteret, Camden N. J. gal. .29½ - —
Zone 2, dms., c.l. or truckload min. frt. alld. or dlvd gal. .51½ - —
l.c.l., works gal. .58½ - —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .38½ - —
tanks, 4,000 gal., min., frt. alld. or dlvd gal. .35½ - —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
di-Methionine fib. dms., frt. alld. 50-lb or more lb 3.50 - —
feed grade, 98% fib. dms., same basis lb 2.65 - —
Methoxychlor, 50% wettable powder, dealers dms. cs. frt alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd zone 1 lb. .20½ - —
t.c.l. same basis lb. .21 - —
hydrogenated, non-ret., dms., c.l., dlvd, Zone 1 lb. .21 - —
t.c.l. same basis lb 21¼ - —
Zone 1 includes New England and Middle Atlantic states Va W. Va., N C., Ohio, Ky., Mich Ind. Ill. Wis St Paul and Minneapolis Minn: St Louis Mo.; Miss., Ala, Ga., Fla. S C. and Tenn

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½ - —
syn., dms., c.l., frt. alld. E. gal. .63½ - —
E. gal. .63½ - —
l.c.l., frt. alld E. gal. .69½ - —
tanks, frt alld. E gal. .48½ - —
Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo West territory all states west of those four
Acrylate dms., c.l., t.l., dlvd lb. .39 - —
t.t.l. dlvd lb. .40 - —
tanks, dlvd lb. .37 — —
Alcohol (see Methanol).
Amyl acetate dms. c.l., dlvd E. lb. .16½ - —
l.c.l., dlvd E lb. .17½ - —
tanks, dlvd E lb. .14 - —
Ketone dms. works lb 1.05 — —
Anthranilate, cns lb. 2.35 - 2.65
Benzoate, cns, dms lb. .60 — .75
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 - .61
Cellulose, special vis (1,500-4,000 ops.) 50 lb. bgs, c.l., works lb. .73 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt. alld. on 100 lbs. lb. .89 1.00
standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld lb. .60 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb. .75 .85
Chloride, indust., cyls., frt. equald, lb. .22 - —
tanks multi-unit, same basis. lb. .15¾ - —
single unit, same basis lb. .12 - —
refrigerator mfrs., cyls., dlvd. lb. .46 — .48
other consumers or service men, cyls., dlvd lb. .67 — —
Chloroform (see 1,1,1,-trichloroethane).
Cinnamate, cns lb. 1.55 — 1.80
Ethyl ketone dms., c.l., dlvd. lb. .14½ - —
l.c.l., dlvd lb. .15½ - —
tanks, dlvd lb. .12 - —
Formate, refd., dms lb. .35 - .40
tech. non-ret. dms., any quantity works lb 10 — —
Heptin, carbonate, bots lb. 31.00 -42.00
p-Hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Ionone standard, cns. dms. lb. 5.00 — 5.25
Isobutyl carbinol, dms., c.l., dlvd. lb. .16½ - —
t.c.l. dlvd lb. .17½ - —
tanks, dlvd lb. .14 - —
ketone, dms., c.l., dlvd lb. .16½ - —
t.c.l. dlvd lb. .17½ - —
tanks, dlvd lb. .14 - —
Methacrylate, dms. c.l., t.l., frt. equald, with Melle, W. Va lb. .31 - —
smaller lots, same basis lb .31½ - —
tanks, same basis lb .29 — —
Naphthyl ketone, cryst., cns lb. 3.00 — 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Roseaniline chloride, NF, 5-lb. fib. dms. lb. 6.54 - —
Salicylate USP cns. 500-lb lots lb. .62 - —
Testosterone USP 100-gram bots. gram. .68 — —
2-Methylbenzylamine, dms., t.c.l., works lb. 1.25 - —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 - —
t.c.l., works lb. 1.90 - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .445 - —
t.c.l., works lb. .45 - —
tanks, works lb. .43 - —
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - —
Chloride, tech., dms. c.l., dlvd. E. lb. .13¼ - —
t.c.l. same basis lb. .16 — —
tanks, same basis lb. .11¾ - —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry grd., paint, plastic, 100 mesh bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite bgs., c.l., works, frt alld E lb. .06½ — —
t.c.l. ex-whse lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E lb. .08¼ - —
t.c.l. ex whse or frt. allg. E lb. .09 - —
rubber bgs. c.l. works, frt. alld. E lb. .06 - —
t.c.l. ex whse or frt allg. E lb. .06¾ - —
wallpaper, bgs., c.l. works, frt, allg. E lb. .06¾ - —
t.c.l. ex whse or frt allg. E lb. .09 — —
white, 5-10 microns, bgs., c.l., works, frt. allg. E lb. .08¼ - —
t.c.l. ex-whse or frt. allg. E lb. .09 — —
Mica, wet-grd. W of miss. ½c. higher; W of Rockies 1c. higher
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .26¾ - .27
New York gal. .28 - .29
Molybdenum (metal) powd., 80 or 200 mesh ctns. works kilo 7.84 — —
325 mesh ctns. works kilo 9.13 — —
Trioxide, pure, dms., works lb. 1.15 - —
tech. dms. works basis Mo content lb. 1.39 — —
Monobutylamine dms. c.l., E. of Rockies lb. .55½ - —
t.c.l. same basis lb. .56½ - —
tanks, same basis lb .53 — —
Monochlorobenzene, dms., c.l., frt. allg or dlvd E lb. .10 - —
t.c.l. same basis lb. .11 - —
tanks, same basis lb. 08¼ - —
Monoethanolamine dms., c.l. dlvd. E lb. .27½ - —
t.c.l. same basis lb. .28½ - —
tanks, same basis lb. .25 — —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine 70% contained amine, dms., c.l. dlvd. E lb. .37½ - —
t.c.l. dlvd E lb. .38½ - —
tanks, dlvd E lb. .35 — —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine dms., c.l., dlvd. E lb. 27½ - —
t.c.l. same basis lb. 28½ — —
tanks, same basis lb 25 — —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Urea, "Hexalin"* Cyclohexanol,
and "Hytrol"* O Cyclohexanone
ready to serve you.

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Los Angeles — Braun Corporation
San Francisco — Braun-Knecht-Heimann Co.
COLORADO
Denver — The Chemical Sales Co.
FLORIDA
Jacksonville — Apperson Chemical, Inc.
Miami — Biscayne Chemical Labs, Inc.
Orlando — Lenfestey Supply Company
Tampa — Lenfestey Supply Company
GEORGIA
Atlanta — Chemical Services, Inc.
ILLINOIS
Chicago — Central Solvents & Chemicals Co.
Chicago — Phillips & Martin Co.
INDIANA
Ft. Wayne — Hoosier Solvents & Chemicals Corp.
Indianapolis — Hoosier Solvents & Chemicals Corp.
KANSAS
Wichita — Barada & Page, Inc.
KENTUCKY
Louisville — Dixie Solvents & Chemicals Co.
LOUISIANA
New Orleans — Southern Solvents & Chemicals Corp.
MARYLAND
Baltimore — Leidy Chemicals Corp.
MASSACHUSETTS
Boston — Howe & French, Inc.
MICHIGAN
Detroit — Western Solvents & Chemicals Co.
Grand Rapids — Wolverine Solvents & Chemicals Co.
MINNESOTA
St. Paul — Lyon Chemicals, Inc.
MISSOURI
Kansas City — Barada & Page, Inc.
Kansas City — Missouri Solvents & Chemicals Co.
St. Louis — Missouri Solvents & Chemicals Co.
NEW JERSEY
Lyndhurst — Stoney-Mueller, Inc.
NEW YORK
Binghamton — Collier Chemicals, Inc.
Buffalo — Chemical Sales Corp.
Rensselaer — Eastern Chemicals, Inc.
Rochester — Chemical Sales Corp.
NORTH CAROLINA
Durham — Cardinal Products, Inc.
OHIO
Cincinnati — Amsco Solvents & Chemicals Co.
Cleveland — Ohio Solvents & Chemicals Co.
Toledo — Toledo Solvents & Chemicals Co.
OKLAHOMA
Tulsa — Ward & Kimball Chemical Co.
OREGON
Portland — Van Waters & Rogers, Inc.
PENNSYLVANIA
Pittsburgh — Vitro Manufacturing Co.
TENNESSEE
Memphis — Chapman Chemical Co.
TEXAS
Dallas — Texas Solvents & Chemicals Co.
Dallas — Van Waters & Rogers, Inc.
Houston — Texas Solvents & Chemicals Co.
UTAH
Salt Lake City — Braun-Knecht-Heimann Co.
Salt Lake City — Wasatch Chemical Co.
WASHINGTON
Seattle — Van Waters & Rogers, Inc.
Spokane — Van Waters & Rogers, Inc.
WISCONSIN
Milwaukee — Wisconsin Solvents & Chemicals Corp.

FOR UREA

ALABAMA
Birmingham — F. H. Ross & Co.
Mobile — F. H. Ross & Co.
CALIFORNIA
Los Angeles — Braun Corporation
San Francisco — Braun-Knecht-Heimann Co.
CONNECTICUT
South Norwalk — Merchants Chemical Co., Inc.
FLORIDA
Jacksonville — F. H. Ross & Co.
GEORGIA
Atlanta — F. H. Ross & Co.
Columbus — F. H. Ross & Co.
Savannah — F. H. Ross & Co.
ILLINOIS
Chicago — Central Solvents & Chemicals Co.
KENTUCKY
Louisville — Merchants Chemical Co., Inc.
MARYLAND
Baltimore — Leidy Chemicals Corp.
MASSACHUSETTS
Fall River — Borden & Remington Co.
Stoneham — George Mann & Co., Inc.
Worcester — Chemical Sales & Service Co., Inc.
MICHIGAN
Detroit — Eaton Chemical & Dyestuff Co.
MINNESOTA
Minneapolis — Merchants Chemical Co., Inc.
MISSISSIPPI
Jackson — F. H. Ross & Co.
MISSOURI
Kansas City — Barada & Page, Inc.
St. Louis — Barada & Page, Inc.
St. Louis — Missouri Solvents & Chemicals Co.
NEW JERSEY
Newark — National Oil & Supply Co.
Paterson — Brown Chemical Co., Inc.
NEW YORK
Buffalo — Chemical Sales Corp.
Hicksville, Long Island — National Oil & Supply Co.
New York — Merchants Chemical Co., Inc.
NORTH CAROLINA
Charlotte — F. H. Ross & Co.
Greensboro — F. H. Ross & Co.
Raleigh — F. H. Ross & Co.
OHIO
Cincinnati — Merchants Chemical Co., Inc.
Cleveland — Ohio Solvents & Chemicals Co.
Columbus — Merchants Chemical Co., Inc.
OREGON
Portland — Van Waters & Rogers, Inc.
PENNSYLVANIA
Altoona — Western Penna. Chemical Co., Inc.
Erie — Western Penna. Chemical Co., Inc.
Middletown (Harrisburg) Western Penna. Chemical Co., Inc.
Philadelphia — Pioneer Salt Co.
RHODE ISLAND
Providence — Borden & Remington Co.
Providence — George Mann & Co., Inc.
SOUTH CAROLINA
Columbia — F. H. Ross & Co.
Greenville — F. H. Ross & Co.
TENNESSEE
Chattanooga — Burkart-Schier Chemical Co.
Knoxville — Burkart-Schier Chemical Co.
Knoxville — F. H. Ross & Co.
Nashville — Burkart-Schier Chemical Co.
TEXAS
Dallas — Van Waters & Rogers, Inc.
Houston — Van Waters & Rogers, Inc.
UTAH
Salt Lake City — Braun-Knecht-Heimann Co.
WASHINGTON
Seattle — Van Waters & Rogers, Inc.

FOR "HEXALIN" & "HYTROL" O

CALIFORNIA
Los Angeles — Mefford Chemical Company
ILLINOIS
Chicago — Central Solvents & Chemicals Co.
INDIANA
Fort Wayne — Hoosier Solvents & Chemicals Corp.
Indianapolis — Hoosier Solvents & Chemicals Corp.
KENTUCKY
Louisville — Dixie Solvents & Chemicals Co.
MASSACHUSETTS
Boston — Howe & French, Inc.
Worcester — Chemical Sales & Service Co., Inc.
MICHIGAN
Detroit — Western Solvents & Chemicals Co.
MISSOURI
Kansas City — Missouri Solvents & Chemicals Co.
St. Louis — Missouri Solvents & Chemicals Co.
OHIO
Cincinnati — Amsco Solvents & Chemicals Co.
Cleveland — Ohio Solvents & Chemicals Co.
Toledo — Toledo Solvents & Chemicals Co.
TEXAS
Dallas — Texas Solvents & Chemicals Co.
Houston — Texas Solvents & Chemicals Co.

*Reg. U. S. Pat. Off.

DEPARTMENT

Monoisopropylamine dms., c.l. dlvd. lb. .32½- —
l.c.l., same basis lb. .33½- —
tanks, same basis lb. 30 - —
Monomethylamine, 30-35% soln., dms., c.l. frt. equald. 100% basis. lb. 40 - —
l.c.l. frt. equald 100% basis. lb. 40½- —
tanks frt equald 100% basis. lb. 31 - —
40% soln., dms., frt. equald., 100% basis lb. .37 - —
l.c.l. frt equald 100% basis. lb 37½- —
tanks frt equald 100% basis. lb. 31 — —
Glutamate, dms., c.l. lb. 1.15 - —
l.c.l. lb. 1.23 - 1.27
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary butylmetacresol (see 6-tert-Butyl-m cresol)
Morphine cns oz 12.40 -12.60
Acetate anhyd. cns oz 9.95 10.00
Hydrobromide, cns oz 9.90 9.95
Hydrochloride NF cns oz 9.90 9.95
Sulfate USP cns oz 9.90 10.05
Morpholine, dms., c.l. dlvd E lb. .55¼- —
l.c.l. dlvd E lb. .56¼- —
tanks, dlvd E lb .52¾ - —
Musk, syn., ambrette 100-lb. lots, fib. dms lb 4.45 5.15
25-lb. lots, cns lb 5.05 5.65
5-lb. lots, cns lb. 5.20 5.50

Musk, syn., ketone, 100-lb. lots, fib. dms. lb. 4.70 - 5.30
25-lb lots, cns lb 5.35 - —
5-lb lots, cns lb. 5.45 - —
xylol, 100-lb lots, fib. dms lb. 1.40 - —
25-lb lots, cns lb. 1.45 - —
5-lb lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb 10½- —
Du ch, bgs. lb. .10½- —
English, yellow, bgs. lb. .11 - —
Montana, oriental, bgs lb. .08½ Nom.
Yellow bgs lb. .10½ - —
Myrobalans, J-1, genuine, bgs. ex-dock ton. 61.00 -62.00
crushed, bgs. ex dock ton 79.00 -80.00
Bombay, bgs., ex dock ton. 58.00 -59.00
Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S)
Naphthalene crude, dom., 74°, tanks, frt. equald lb. .06¼- —
78° bgs., c.l., same basis lb. .07½- .08
l.c.l., same basis lb. .07¾- .08¼
tanks, same basis lb. .07 — —
imp. 78° bgs., large lots lb. .05 Nom.
refd., indust., chipped, crushed, bgs., frt. alld. lb. .12½- —
tanks, same basis lb. .11¾- —

Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs., 50 lbs., c.l., same basis lb. .15¾- —
1-lb. pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
l.c.l., works lb. .35 - —
a-Naphthylamine, bbls., frt. alld lb .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Naringin, fib. dms. lb. 8.50 - —
Neocinchophen USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 5 kilo lots, basis, activity gram. .45 - —
100-999 gram lots, basis, activity, gram. .55 - —
Nerolin, cns lb. 2.45 - 2.65
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .73 - .80
Carbonate, bbls., dlvd. lb. .80¾- .87¾
Chloride, bbls., dlvd. lb. .40½- .48½
Formate, bbls., ton lots, frt. alld. lb. .72 - .73
Metal, electrocathodes, cs., works. lb. .74 - —
Nitrate, bbls., works lb. .32½- .33½
Oxide, black, bbls. lb. .84 - —
green, bbls. lb. .85 - —
Sulfate, bgs., c.l., dlvd. lb. .32½- —
l.c.l., dlvd. lb. .33½- .40½
Nicotinamide, USP, dms., frt. adjusted kilo. 12.00 -12.30
Hydrochloride, dms. frt. adjusted. kilo. 11.50 -11.80

Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld. lb. 1.05 - —
Niger seed, bgs. lb. .12 - .12½
Nikethamide, cbys. lb. 7.50 - —
m-Nitroaniline, cryst., dms. frt. alld. lb. 1.15 - —
paste, dms., frt. alld., 100% basis. lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
l.t.l., frt. alld lb. .51 - —
p-Nitroaniline, dms., frt alld lb. 445 - —
Nitrobenzene, dbl dist., dms., c.l., frt. alld lb. .14 - —
l.c.l. frt. alld lb. .15 - —
tanks, frt. alld lb. .12 - —
Nitrocellulose, ester soluble, 30-35 cps., ¼, ½ ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l. works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps bbls c.l., same basis lb. .36 — —
l.c.l., same basis lb. .37 — .39
250-400, 600-1,000 secs., bbls., c.l. same basis lb. .39 — —
l.c.l. same bassi lb. .40 — .42
Spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis. lb. .41 - —
l.c.l. same basis lb. .42 — .44
5-6 cps., 40-60 secs., bbls., c.l., same basis. lb. .40 - —
l.c.l. same basis lb 41 — 43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene dms. c.l., frt. alld lb. .15 - —
l.c.l. same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms lb. .26 - .27
2-Nitro-4-chlorophenol dms lb. .75 - —
Nitroethane, dms., c.l. dlvd. E lb. .24 - —
l.c.l. dlvd E lb. .24¾- —
tanks, dlvd E lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions tanks frt. equald. unit. 1.20 - —
Nitrogenous process (ankage, bulk, works unit-ton. 3.00 4.00
Sewage sludge, bulk, works, unit-ton. 2.95+ .50
Nitromethane, dms., c.l. dlvd. E lb. .24 - —
l.c.l., dlvd E lb. .24¾- —
tanks dlvd E lb. .22½- —
Nitromethane prices West of Rockies are 1c. higher
a-Nitronaphthalene, bbls. frt. alld. lb. .41 - —
Nitropropane-1 and 2, dms., c.l., dlvd. E lb. .22½- —
l.c.l., dlvd. E lb. .23¼- —
tanks, dlvd. E lb. .21 - —
Nitropropane prices West of Rockies are 1c. higher.
o-Nitrophenol dms. works, frt. equald lb. .94 - —
p-Nitrophenol dms. frt. alld., c.l. lb. .51 - —
l.c.l. lb. .53 - —
o-Nitrotoluene, dms. c.l. frt. alld. lb. .10 - —
l.c.l. frt. alld lb. .11 - —
tanks frt. alld lb. .09 - —
p-Nitrotoluene, dms., works lb. .33 - —
m-Nitro-p-toluidine dms lb. 1.59 - —
Nitrous ether conc. bots 100-lb. lots lb. 1.28 1.35
Nonyl phenol dms. c.l. frt. alld. lb. .26½- —
l.c.l., frt. alld. lb. .27½- —
tanks, frt. alld lb .24½- —
Nutgalls, Aleppo bgs lb. .36 .38
Chinese bgs lb No prices.
Nutmeg, East Indian, bgs. lb. 2.80 - —
West Indian, bgs lb. 2.80 - —
Nux vomica, bls lb. .10 - .12
powd. bbls., bxs lb .15 - .17

O

Octane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
i-Octanol, tech. dms., c.l., dlvd. lb. .35 - —
l.c.l. dlvd lb. .37 - —
tanks, dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .24 - —
l.c.l., works lb. .24½- —
tanks, works lb. .23 - —
Octyl phenol in dms., 11c. higher.

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity quality or in individual suppliers, views.)

Oil, abies, siberica, cns lb. 4.25 - 5.00
Almond, artif. bitter (see Benzaldehyde).
nat., bitter, F.P.A. bots lb 3.00 3.75
NF, bots. lb 3.25 3.75
sweet, USP, cns., dms. lb. 1.45 - 1.50
Allspice (see Oil, pimento).
Amyris, dms lb 1.25 —
Angelica root, bots. lb. 85.00 -100.00
seed, bots. lb. 80.00 -95.00
Aniline (see A).
Anise, USP, dms lb. 2.75 - 3.50
Apricot, kernel, USP, dms. lb. .75 - .90
Avocado, cns. lb. 3.25 - —
Bay, NF, Puerto Rican, 50-55%, cns lb. 2.15 - 3.00
55-60%, cns lb. 2.50 - 3.00
West Indian, 50-55%, cns., dms. lb 1.85 2.40
Bergamot, nat., NF, Italian, cns lb. 10.25 -10.50
Birchtar, crude, cns lb 1.50 1.90
rectified, cns. lb 1.75 - —
Bois de rose, Brazil, dms lb 3.50 - —
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns. lb. 1.75 - 3.30
redist. USP, cns lb 2.25 3.40
Calamus, bots lb. 12.00 -20.00
Camphor, sassafrassy, dms. lb. .28 - .35
white, dms lb .29 —
Cananga, native, cns. lb 8.50 - 8.75
rectified, cns lb. 10.00 -13.00
Caraway, NF, cns lb. 3.65 4.00
Capsicum (see Capsicum oleoresin).
Cardamom, NF, bots lb. 38.00 -40.50
Cassia, USP (see Oil, cinnamon, USP).
Castor, dom., blown, dms., c.l. lb. .2850- —
l.c.l. lb. .2950- —
dehydrated, bodied, dms., c.l. lb. .3010- —
l.c.l. lb. .3110- —
tanks lb. .2810- —
unbodied, dms., c.l. lb. .2860- —
l.c.l. lb. .2960- —
tanks lb. .2650- —
hydrogenated, bgs., ton lots lb. .3375- —
l.c.l., dlvd lb. .3575- —
No. 1, dms., c.l. lb. .2500- —
l.c.l. lb. .2600- —
tanks lb. .2300- —
No. 3, tech., dms., c.l. lb. .2325- —
l.c.l. lb. .2450- —
tanks lb. .2150- —

HIGHEST QUALITY LEMON OIL BEARS THE *PRODUCER'S* LABEL!

- Pure, unadulterated lemon oil . . . cold-pressed in California . . . and *packed by the producer* . . . has long provided the accepted standard for top quality and flavor.
- M.C.P. LEMON OIL is just such a product. Prepared for many years for distribution by others, M.C.P. LEMON OIL is now packed *under this experienced producer's own label.*
- Furthermore, all lemon oil packed under the M.C.P. label is *exclusively first grade lemon oil* . . . thus assuring the user receiving a product that is *unsurpassed* for flavor, purity, and highest quality.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

W. J. BUSH & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Oil, castor, USP, dms., c.l.	lb.	.2650	—
l.c.l.	lb.	.2750	—
tanks	lb.	.2450	—
refined, deod., dms., c.l.	lb.	.2950	—
l.c.l.	lb.	.3050	—
imp., No. 1, Brazilian, tanks	lb.	.21½	—
sulfonated, 50%, dms., works	lb.	.15¼ -	.15½
75%, dms., works	lb.	.20	.20½
Cedarleaf, USP, XIII, cns., dms.	lb.	3.75 -	4.25
Cedarwood, cns., dms	lb.	.63 -	1.00
Celery seed, bots.	lb.	15.00 -	—
Chamomile, blue, Hungarian, bots.	lb.	225.00 -	—
Chenopodium, NF, cns	lb.	4.50 -	4.75
Chinawood (see Oil, tung).			
Cinnamon, bark, bots	lb.	36.00 -	70.00
leaf, crude, dms	lb.	1.60 -	2.00
USP cns., dms. (Cassia)	lb.	10.25 -	10.90
Citronella, Ceylon, cns., dms.	lb.	.87 -	.90
Java, cns.	lb.	1.95 -	—
Java-type, cns	lb.	1.20 -	—
Clove, bud, USP, cns., dms	lb.	2.65 -	2.85
leaf, crude dms	lb	1.20 -	1.50
Coconut, crude, tanks, N. Y.	lb.	.12⅛ -	—
Pac. coast	lb.	.11⅛ -	—
refd. Cochin type dms. tax incl.,	lb.	.19¼ -	.19½
deodorized, tax incl., dms.	lb.	.22¼ -	.23¼
Cod, Newfoundland, dms	lb.	.11⅛ -	.11⅞
Codliver, USP, dms	gal.	1.45 -	1.55
Copaiba, cns.	lb.	1.75 -	2.50
Coriander, USP, bots.	lb.	10.50 -	—
Corn, crude, tanks, works	lb.	.14½ -	—
foots (soapstock), acid 95% tanks, N. Y.	lb.	.06 -	—
refd., salad, dms	lb.	.2016 -	.2041
tanks	lb.	.1816 -	—
Costus, bots	oz.	6.00 -	—
Cottonseed, crude, tanks, South, East	lb.	.13⅞ -	—
Valley	lb.	.13⅞ -	—
Texas, Lubbock	lb.	.13⅞	Nom.
Waco	lb.	.13⅞ -	—
foots (soapstock), acid 95%, tanks, N. Y.	lb.	.05⅛ -	—
refd, salad, dms	lb.	.19½ -	.19⅝
tanks	lb.	.17½ -	—
Creosote (see Creosote, coaltar).			
Cubeb, cns	lb.	4.10 -	4.25
Cumin, bots. cns	lb.	4.75 -	5.00
Cypress, bots	lb.	5.30 -	—
Degras (see D).			
Dillseed, bots	lb.	2.80 -	4.25
Dillweed, dom., bots., dms	lb.	3.25 -	4.25
Dip (see D)			
Erigeron, cns	lb.	5.50 -	7.50
Eucalyptus, NF, rect., 70-80% dms.	lb.	.62 -	—
80-90% dms.	lb.	72 -	—
Fennel, sweet, USP, cns	lb.	2.25 -	—
Fir, Canada, cns	lb.	4.75 -	—
Fish, refd., alkali, dms	lb.	.1450 -	.1500
kettle-bodied, dms	lb.	.1680 -	.1730
light-pressed, dms	lb.	.1300 -	.1350
tanks	lb.	.1150 -	—
Fishliver, crude for feeds or concentrating 4,000 to 12,000 A units per gram dms., 1,000,000 units.		.08 -	.09
10,000 to 20,000 A units per gram, dms., 1,000,000 units.		.09 -	.10
25,000 to 35,000 A units per gram, dms. 1,000,000 units.		.09 -	.10
40,000 to 55,000 A units per gram, dms. 1,000,000 units.		.10½ -	.11
100,000 A units per gram., dms 1,000,000 units.		14 -	—
200,000 A units per gram., dms 1,000,000 units.		.15½ -	—
500,000 A units per gram., dms 1,000,000 units.		.16 -	—

Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900

Fusel (see F).			
Garlic, pure, bots	oz.	4.25 -	5.00
Gaultheria (see Oil, wintergreen)			
Geranium, Algerian, cns	lb.	13.50 -	14.50
Bourbon, cns	lb.	13.00 -	—
Turkish (see Oil palmarosa)			
Ginger, dist., bots	lb.	24.00 -	—
Grapefruit, dms	lb.	1.60 -	—
Grease, No. 1, dms., c.l.	lb.	.15¾ -	—
l.c.l.	lb.	.16¾ -	.18¾
extra winter strained dms. c.l.	lb.	.18¼ -	—
l.c.l.,	lb.	.19¼ -	.21¼
prime, burning, dms., c.l.	lb.	.19¾ -	—
l.c.l.	lb.	.20¾ -	.22¾
Guaiacwood, cns.	lb.	1.60 -	—
Hemlock, cns	lb.	2.10 -	2.50
Juniper berry, bots	lb.	2.75 -	4.00
	lb.	2.75 -	4.00
twice rectified, bots	lb.	3.60 -	7.00
Tar, NF (see Juniper tar).			
Wood, tech., cns.	lb.	.38 -	.55
Lard (see Oil, grease).			
Laurel leaf, dms., cns	lb.	9.75 -	12.50
Lavardin dms. cns	lb.	2.55 -	2.93
Lavender, flower, USP, French,			
35-37% ester, cns	lb.	5.50 -	—
38-40% ester, cns	lb.	7.50 -	—
40-42% ester, cns	lb.	9.00 -	—
spike, Spanish, cns	lb.	2.60 -	—
Lemon, USP, Calif., cns., dms	lb.	4.25 -	5.00
Messina cns.	lb.	5.75 -	—
terpeneless bots	lb.	50.00 -	85.00
Lemongrass, cns., dms	lb.	1.45 -	—
Lime, dist., Mexican, cns	lb.	5.00 -	5.25
West Indian, cns	lb.	5.00 -	—
expressed, West Indian, cns	lb	6.00 -	6.00
terpeneless, bots.	lb.	50.00 -	85.00
Lignaloe wood, Mex., cns	lb.	4.65 -	5.00
Linseed, raw, dms., c.l., N. Y.	lb.	.1650 -	—
l.c.l.	lb.	.1750 -	.1800
tanks, f.o.b. Minneapolis	lb.	.1320 -	—
New York	lb.	.1460 -	—
tankwagon, New York	lb.	.1490 -	.1500
Boiled linseed oil 009c per lb higher.			
Mace, dist., cns., dms.	lb.	14.00 -	—
Mandarin (see Oil tangerine)			
Menhaden, crude, tanks, works, Atlantic & Gulf	lb.	.08¼	Nom.
Mineral, white (see Oil white mineral).			
Mirbane (see Nitronenzene)			
Mustard seed, nat. dms	lb.	.17⅛	Nom.
syn., bots	lb.	1.60 -	1.85
Neatsfoot, 15° cold test, dms.	lb.	.30 -	.33
20° cold test, dms	lb.	.29 -	.32
30° cold test, dms	lb	.28 -	.31
Neroli, NF, French bots	lb.	375.00 -	—
Nutmeg, USP, dist., East Indian, cns., dms	lb.	15.00 -	—
West Indian, cns. dms	lb.	14.50 -	—
Ocotea cymbarum, dms	lb.	.53 -	—
Oiticica, liq., dms	lb.	.16 -	.16¼
tanks	lb.	.16½ -	.16¾
Oleo, extra, dms	lb.	.18 -	.18½
Olibanum, bots	lb	5.50	7.63
extra fine, bots	lb	6.00	9.00
Olive, edible, Spanish, dms., duty paid	gal.	3.50	Nom.
Orange, sweet, dist., cns., dms	lb.	.45 -	.80
expressed, USP, Brazilian, cns., dms.	lb.	No stocks.	
Calif., cns., dms	lb.	.75 -	—
Florida, cns., dms	lb.	.55 -	—
Messina, cns	lb.	3.85 -	5.85
West Indian, cns., dms.	lb.	2.50 -	3.65
sesquiterpeneless, bots	lb.	65.00 -	120.00
Origanum, Spanish, cns	lb	2.00	—
Palm, clarif., dms	lb.	.15¼ -	.16¼
Palmarosa, cns	lb.	6.75 -	—
Paraffin, pale, 100-110 vis., at 100°F., tanks, East Coast refy	gal	.14 -	—
Patchouli, dms	lb.	6.00 -	—
Peach kernel, USP (see Oil apricot kernel).			
Peanut, crude, tanks, f.o.b. mills.	lb.	.15 -	—
refd., dms	lb.	.20¾ -	.21
tanks	lb.	.18¾ -	—
Pennyroyal, USP, imported, cns.	lb	2.75 -	3.50
Peppermint, nat., dms	lb.	4.75 -	6.50
redist., USP, dms	lb.	5.25 -	6.75
Persic, USP (see Oil apricot kernel)			
Petitgrain South American cns.	dms.	3.00 -	—
Pimento, berry, NF, dms	lb.	5.50 -	—
leaf, cns.	lb.	2.00 -	2.35
Pine, dest.-dist., dms., l.c.l., works.	lb.	.12¼ -	—
ex whse.	lb.	.14¼ -	—
steam-dist.,, dms., ex whse. N.Y.C	lb.	.176 -	—
dlvd.	lb.	.179 -	—
Pineneedle, Siberian (see Oil abies siberica).			
Rapeseed, tankcars	lb.	.18¾ -	—
Red (see Acid, oleic).			
Rice bran, clarif. dms., l.c.l	lb.	.18	Nom
tanks, dlvd. E	lb	15 -	.15½
Rose, nat., Bulgarian, bots	oz.	70.00 -	—
Rosemary, Spanish, NF, cns., dms.	lb.	.70 -	1.00
tech., cns. dms	lb	50	70
Rue, bots	lb	2.00	2.50
Safflower, dms., N. Y.	lb.	.1785 -	.1835
tanks, same basis	lb	.1585 -	—
Sage, clary bots	lb	18.75 -	19.00
Dalmatian, cns	lb.	4.75 -	—
Spanish cns.	lb	1 20	1.45
Sandalwood, cns	lb.	17.00 -	—
Sardine crude tanks Pac coast.	lb.	.08½	.08¾
Sassafras, artif., dms	lb.	.50 -	.62
nat., dom., dms.	lb.	1.45 -	2.10
imp., Brazilian (see Oil, ocotea cymbarum).			
Savin, cns	lb	2.75 -	—
Savory, cns.	lb	4.25 -	—
Sesame, USP, dms	lb.	.38 -	.39
Shingle stain tar distillate, dms., c.l., works	gal.	.35 -	—
c.l., works	gal	44 -	—
tanks, works	gal	23 -	—
Snakeroot, Canada, cns.	lb.	No stocks.	
Soybean, crude, tanks, Decatur.	lb.	.13⅜ -	—
foots, soapstock, acid 95%, tanks, N. Y.	lb.	.07 -	—
refd., alkali, dms	lb.	.1832 -	.1852
tanks	lb.	.1632 -	—
clarified, dms	lb.	.1602 -	.1632
tanks	lb.	.1502 -	—
salad, dms	lb.	.1853 -	.1878
tanks	lb.	.1653 -	—
Spearmint, dms	lb.	4.25 -	—
Sperm, bleached, winter, 45°, dms	lb.	.1775 -	.1825
tanks	lb.	.1600 -	—
nat., winter, 45°, dms	lb.	.1675 -	.1725
tanks	lb.	.1500 -	—
Spruce, cns., dms.	lb.	2.10 -	2.75
Sweet birch, USP, Northern, cns.	lb	4.25	9.50
Southern cns	lb	2.30	2.75
Tall, crude, dms., c.l., works	lb.	.04½ -	—
tanks, works	lb.	.03 -	—
dist., dms., c.l., works	lb.	.07¾ -	—
l.c.l., works	lb.	.08 -	.08½
tanks, works	lb.	.06½ -	—
refd., dms., c.l., works	lb.	.06¾ -	—
l.c.l., works	lb.	.07 -	.07½
tanks, works	lb.	.05½ -	.06
Tallow, acidless, dms., c.l.	lb.	.14½ -	—
l.c.l.	lb.	.15½ -	.17
Tangerine, Floridian, dms	lb.	2.00 -	2.80
Tansy, dms	lb.	7.50 -	8.40
Tar acid (see T's).			
Pine comi dms. c.l., works	lb	0561 -	—
l.c.l., works	lb	0634 -	—
whse	lb	0745 -	—
tanks works	lb	046 -	—
rectified, NF dms., incl., l.c.l., works, South	gal	1.05 -	—
ex whse, N Y C	gal	1.15 -	—
refd., dms., incl., l.c.l., works.	gal	.92 -	—
ex-whse, N.Y.C.	gal.	1.02 -	—
Theobromine (see Cocoa butter).			
Thyme, NF red., cns., dms	lb	1.45 -	1.75
white, cns	lb	1 70	2.00
tech white cns	lb	40	1.85
Tung, dms., c.l., N. Y	lb.	.24¼ -	—
l.c.l., same basis	lb.	.24¾ -	.25¼
tanks, N. Y	lb.	.22¾ -	—
domestic mills	lb.	.22½	Nom.
Turpentine, NF, cns., dms.	lb.	.28 -	.45
Vetiver, Bourbon, cns	lb.	11.75 -	11.90
Haitian cns.	lb.	9.25 -	10.00
Java cns	lb	18 50 -	20.00
Wheat germ, 5-gal. dms	gal.	11.25 -	—
Turkey red (see Oil castor sulfonated).			
White mineral, tech., 50-65 vis., non ret dms c.l. t.o.b. N. Y.	gal.	.59 -	—
65-75 vis. non-ret dms. c.l., same basis	gal.	.60 -	—
l.c.l., same basis	gal.	.68 -	—

OIL OF ORANGE, U.S.P.

Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

Exchange

Sunkist Growers

Products Department • Ontario, California

Distributed in the U.S. and Canada by
Dodge & Olcott, Inc., 180 Varick St.
New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave.
New York 11, N.Y.
Ungerer & Company, Inc.
161 Avenue of the Americas
New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

Oil, White Mineral—Petroleum Naphtha

Oil, white mineral, 80-90 vis., non-ret. dms., c.l., same basis gal. .61 - —
l.c.l., same basis gal. .68 - —
135-138 vis non-ret dms.
c.l., same basis gal. .67 - —
l.c.l., same basis gal. .74 - —
145-155 vis non-ret dms.
c.l., same basis gal. .73½- —
l.c.l., same basis gal. .80½- —
USP, 180-190 vis., non-ret. dms.,
c.l., same basis gal. .75 - —
l.c.l., same basis gal. .82 - —
200-210 vis non-ret dms.
c.l., same basis gal. .79 - —
l.c.l., same basis gal. .85 - —
345-355 vis non-ret dms.
c.l., same basis gal. .82½- —
l.c.l., same basis gal. .90½- —
Wintergreen, USP, nat., Northern, cns lb. 6.35 - 10.30
Southern, cns lb. 4.50 - 7.50
syn (see Methyl salicylate)
Wood (see Oil, tung).
Wormseed (see Oil, chenopolium, NF).
Wormwood, cns. lb. 5.50 - —
Ylang-ylang, Bourbon, bots lb. 14.00 - 16.00
extra bots lb. 28.00 - 40.00
Madagascar, bots lb. No stocks
Oleostearine, dms lb. .14½- .15
Opium USP cns oz. 19.20 - 19.45
gran. USP, cns oz. 21.65 - 21.90
powd USP cns oz. 21.65 - 21.90
Orange cadmium selenide lithopone
light shade bbls., frt alld E of Rockies lb 1.80 —
deep shade bbls lb 2.00 —
Cadmium-mercury lithopone, deep shade bbls lb. 1.78 —

Orange, chrome, CP, bbls., dlvd. N. of Tennessee and N C. E of Miss R. include Davenport, Tenn., and E of Minneapolis Rock Island, St. Louis, St. Paul lb. .35 —

Chrome orange prices are ½c higher dlvd Ala., Fla. Ga., La (Shreveport); 1½c Miss N C. S C., Tenn. Dallas and Ft Worth Tex. El Paso Tex.; 2c. Cedar Rapids Des Moines, Kansas City Lincoln Omaha St Joseph; 1.6c higher dlvd Pac Coast for Denver Pueblo, Salt Lake City Wichita prices are equalized with Chicago

Dinitroaniline toner, CP lb. 1.50 - —
Mineral American bbls. l.c.l. works lb 22.35 - —
Molybdated, bbls lb. 48 - —
o-Nitroaniline toner, kegs lb. 1.35 - —
Orange peel, bitter Haitian bls lb 14 16
sweet bls lb 16 18
Orris root, Florentine, bls lb 55 -
powd. bbls. bxs lb 68 —
Verona bls. lb 35 40
powd., bbls., bxs lb 45 —
Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine)
Orthochloroanilin (see o-Chloroaniline)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl).
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage orange cryst. No 1, bbls. l.c.l. lb. .40 - —
extract liq. No. 1 bbls., l.c.l., lb. .19 - —
Ouabain, USP, bots gram. 3.00 - 4.00
Oxyquinolin sulfate cns. 100-lb. lots, works lb. 4.75 5.00
smaller lots works lb. 4.92 - 5.17

P

Papain, USP, African, bots lb. 5.00 - —
Ceylon lb. 4.50 - —
Papaverine, nat. or syn hydrochloride USP cns., 25-oz. to 100-oz. lots oz. 5.00 - —
smaller lots oz. 5.05 - 5.20
Sulfate cns. oz. 7.10 - 7.35
Paprika, Roumanian, bgs lb. .26 - —
Spanish, bgs lb. .60 - —
Yugoslavian, bgs lb. .35 - —
Para-aminophenol (see p-Aminophenol).
Parachloro orthonitroanilin (see 4-Chloro-2-nitroaniline).
Para-anisidin (see p-Anisidine).
Parachloranilin (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude, scale, white, 123°-127°F. ASTM. tanks, refy. lb. .0710- —
fully refd., 122°-124°F. ASTM, tanks, refy lb. .0815- —
125°-127°F. ASTM, tanks, refy lb. .0815- —
130°-132°F. ASTM, tanks, refy lb. .0815- —
132°-134°F. ASTM, tanks, refy lb. .0815- —
135°-137°F. ASTM, tanks, refy lb. .0815- —
AMP temperatures are an arbitrary 3°F higher than ASTM

Paraformaldehyde 91% flake, bgs., c.l. frt. alld lb. .11¼- —
l.c.l., frt. alld lb. .13¼- .14¼
powd., bgs., c.l. ex whse lb. .167 - —
l.c.l., ex whse lb. .182 - —
USP, X, fib dms., c.l. lb. .19 - —
1,000-lb. lots lb. .20 - —
smaller lots lb. .21½- —
Paraldehyde tech. 98%, 55-gal. dms., c.l., dlvd lb. .14 - —
l.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .11½- —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidin (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15%, dealers, bgs., dms., frt. alld lb. .50 .53
tech., dms., c.l., t.l., works lb. 1.3395- —
l.c.l., works lb. 1.51 - —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paris green, dealer dms., c.l., frt. alld lb. .44 - .47
t.c.l., same basis lb. .45 - .48
Passion flower herb, bls. lb. .25 - —
Peanut meal, 45% old process, bgs., mills ton. 48.00 - —
Pectin, citrus, NF, powd. bbls lb. 2.05 - 2.06
tech., powd., bbls. lb. 1.25 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, bulk 1,000,000 units. .0675- .0700
Procaine, bulk 1,000,000 units. .0675- .0700
Sodium, bulk 1,000,000 units. .0775- .0800
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .22 - —
l.c.l., same basis lb. .23½- .30
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
t.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pepper, black, Malabar, spot. bgs. lb. .28½- —
red, Gondar, spot, bgs. lb. No prices.
Japanese, hontaka bgs lb. .34 - —
birdseyes, bgs. new crop lb. No prices.
Mombasa, bgs., shipt lb. .56 - .57
Nigerian, bgs lb. .42 - —
Turkish, bgs. lb. .28 - —
white, bgs lb. .35 - .36
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imp., bls lb. .85 - —
Perchloroethylene, dms., c.l., or truckloads, dlvd lb. .13 - —
l.c.l., dlvd. lb. .14½- —
tanktruck, 1,000 gal., min. dlvd lb. .12 - —
tanks dlvd. lb. .11½- —
Peru balsam, dms lb. 1.25 - 1.50
Petrolatum, extra amber, dms., c.l., refy lb. .06¼- —
l.c.l., dlvd lb. .08¼- —
tanks, refy. lb. .04¼- —
cream, dms., c.l., refy lb. .07½- —
l.c.l., dlvd. lb. .09¾- —
tanks, refy. lb. .05¼- —
USP, white, lily, dms., c.l., refy. lb. .07⅞- —
l.c.l., dlvd lb. .10⅛- —
tanks, refy lb. .05⅝- —
snow, dms., c.l., refy lb. .08⅜- —
l.c.l., dlvd lb. .10⅝- —
tanks, refy lb. .06⅛- —
yellow, soft, dms., c.l., refy. lb. .06½- —
l.c.l., dlvd lb. .08¼- —
tanks, refy lb. .04¼- —
Petroleum, lacquer diluent, 150°-240°F, b.r., tanks, West Coast, ex tax, Los Angeles. gal. .174 - —
East coast, N. J., N. Y. gal. .20 - —
Group 3, benzol type, tanks. gal. .15125- —
toluol type, tanks gal. .14375- —
Mineral spirits, reg. tanks, Calif., ex tax San Francisco gal. .169 - —
East coast, N.J., N.Y. gal. .18 - —
Group 3 gal. .12875- —
tankwagon, Boston gal. .20 - —
Buffalo gal. .20½- —
Chicago gal. .289 - —
Cleveland gal. .23½- —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Providence gal. .20½- —
odorless, tanks, refy., Watson, cal. gal. .25 - —
Borger, Tex gal. .25 - —
Houston, Tex gal. .25 - —
Philadelphia gal. .32 - —
Newark, dlvd gal. .3328- —
N. Y., dlvd gal. .34½- —
Wood River, Ill gal. .2725- —
tankwagon, N. J., dlvd gal. .37½- —
N. Y., dlvd gal. .38½- —
Naphtha, 140°F, flash, tanks, East Coast, N. J., and N. Y. gal. .18 - —
Group 3 gal. .155 - —
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F., b.r., tanks, West Coast, Los Angeles gal. .174 - —
Portland, Ore. gal. .18 - —
San Francisco gal. .179 - —
Seattle, Wash gal. .18 - —
East Coast, N. J., and N. Y. gal. .19 - —
Group 3 gal. .13875- —
tankwagon Boston gal. .21½- —
gal. .21¼- —
Chicago gal. .299 - —
Cleveland gal. .24½- —
Newark gal. .20½- —
New York gal. .20½- —
Philadelphia gal. .21½- —
Pittsburgh gal. .20 - —

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Petroleum solvent, partial aromatic, tanks, 205°-282° F., b.r., 41°C., m.a.p., N. Y., N. J. gal. .245 - —
212°-278°F b.r. 43°C m.a.p., N. J gal. 26 - —
212°-284°F b.r. 19°C. m.a.p., N. J gal. 29 - —
224°-280°F., b.r., 48°C, m.p.a., Houston gal. .215 - —
273°-361°F., b.r., 29°C., m.a.p., N. J gal. .29 - —
282°-325°F b.r., 41.5°C. m.a.p. Houston gal. 28 - —
287°-386°F. b.r 31°C m.a.p., N. J. gal. 29 - —
310°-314°F., b.r., 13.5°C., m.a.p., Texas City gal. .33 - —
310°-348° b.r., 17°C. m.a.p., N Y N J gal. 35 - —
320°-360°F., b.r., 10°C., m.a.p., N. Y., N. J. gal. .33 - —
324°-349°F., 37°C. m.a.p., Houston gal. 33 - —
341°-390°F., b.r., 35°C., m.a.p., N J gal. .27 - —
352°-413°F., b.r., 30°C., m.a.p., Houston gal. .33 - —
358°-401°F., b.r., 25°C., m.a.p. N Y. N J gal. 39 - —
364°-404°F b.r., 19°C m.a.p., N Y., N. J gal. .425 - —
367°-418°F b.r. 19.6°C m.a.p. N Y N J gal .33 - —
Rubber, tanks, Cal., ex tax, San Francisco gal. .178 - —
East Coast N Y gal. .19 - —
Group 3 gal. .13875- —
Stoddard tanks, East Coast, N. J., N. Y. gal. .18 - —
Pennsylvania, western gal. .16 - —
Group 3 gal. .12875- —
tankwagon, Boston gal. .20 - —
Chicago gal. .209 - —
Cleveland gal. .23½ - —
Los Angeles, ex tax gal. .199 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½ - —
Pittsburgh gal. .19 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms. c.l. works lb. .16½ - .18¾
t.c.l. works lb. .17½ - 19
tanks, works lb. 14½ - 17
50-55% sulfonic content, non-ret. dms. c.l. works lb. .16 - —
l.c.l. works lb. .17 - —
tanks works lb. .13 - —
o-Phenetidine dms. t.l. frt alld. E lb 91 - —
t.c.l. same basis lb 93 - —
p-Phenetidine dms., c.l., frt alld lb. 1.05 - —
l.c.l., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - —
Phenol 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies lb. 17¾ - .18
t.c.l. same basis lb. .18¼ - .19
tanks, same basis lb .16 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½ - —
t.c.l. same basis lb. 16½ - —
tanks same basis lb. .15½ - —
39°C. or above, tar distilled, non-ret. dms., c.l., same basis. lb. .19¼ - .19½
t.c.l same basis lb. .19¾ - .20½
tanks, same basis lb. .17½ - —
USP syn. dms c.l. t.l., frt. alld lb. 20 - —
t.c.l. same basis lb 22 - —
tanks, same basis lb 18 - —
Phenolphthalein, USP or yellow, bbls dms 2,000-lb tots. lb. 1.15 - —
smaller tots lb 1.17 - 1.22
Phenothiazine NF, fib dms., c.l. frt adjusted lb. .43 - —
over 2,100 lbs., same basis lb. .45 - —
less than 2,100 lbs. same basis. lb. .47 - —
Phenyl acetate dms. 100-lb. tots, works lb .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde soln., 50%, bots lb 2.40 - 2.70
100% bots lb 4.00 - 4.65
dl-Phenylalanine, dms., works lb. 27.00 - 37.50
1-Phenyl-3-carnethoxy pyrazolone-5, 200-lb fib. dms. dlvd. E lb. 3.45 - —
smaller dms., dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine dms., c.l., dlvd. E lb. 40½ - —
t.c.l. dlvd E lb. 41½ - —
tanks, dlvd E in. .38½ - —
m-Phenylenediamine dms. frt. alld. lb. 95 - —
o-Phenylenediamine coml., 100 to 1,000 lbs. fib dms., works lb 1.70 - 1.80
p-Phenylenediamine refd., tech., dms., works lb 1.42 - —
Phenylethanolamine dms., c.l., works lb 75½ - —
l.c.l., same basis lb. 76¼ - —
Phenylethyl acetate, bots lb 1.25 - 1.60
Phenylhydrazine base, CP bots lb 3.90 - 3.97
Hydrochloride coml kgs. works lb 1.75 - —
purif. bots., works lb 5.17 - —
1-Phenyl-3-methyl pyrazolone-5 250-lb lots, dlvd E lb 1.80 - —
smaller lots, dlivd E lb 2.10 - —
Phenylethylphenyl acetate, bots lb 4.15 - 4.35
o-Phenylphenol dms t.c.l. works lb 42 - .44
p-Phenylphenol, bgs., c.l., works lb. .37 - —
l.c.l., works lb .41½ - —
Phloroglucinol coml., fib. dms., works lb 6.40 - —
C.P., bots. works lb 17.75 - —
tech. fib drums, works lb 10.45 - —
Phosphate defluorinated (see under D)
Rock Curacao Atlantic ports, New Orleans ton 48.00 - —
Florida land pebble, run-of-mine, washed dried unground, bulk, c.l., mines, 68-66% b.p.l., bulk, c.l. mines long-ton. 5.115 - —
70-68% b.p.l., c.l., same basis long-ton. 5.515 - —
72-70% b.p.l., c.l., same basis long-ton. 6.165 - —
75-74% b.p.l., c.l., same basis long-ton. 7.165 - —
77-76% b.p.l., c.l., same basis long-ton. 7.165 - —

The Florida prices (above) are based on fuel oil at $2.82 per bbl. and labor at $1.43. Recent oil advance currently absorbed.

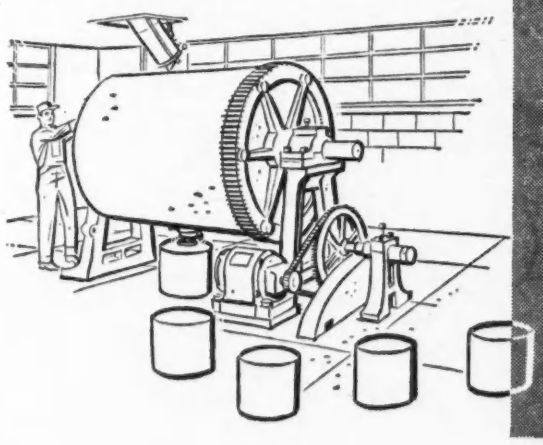
Phosphorus amorph. red dms., t.l., works lb. 48 - —
smaller lots, works lb. .49 - .50
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
t.c.l. works frt equald. lb. .21½ - —
tanks works frt equald. lb. 19 - —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tanks works lb .12½ - —
Pentasulfide, solid, dms., c.l., works lb. .11½ - —
t.c.l. works lb. .12½ - —
Phosphorus pentoxide, dms., c.l., works lb. .1395- .1450
l.c.l., works lb. .1695- .1750
Sesquisulfide, tins, cs., c.l., works. lb. .38 - —
l.c.l., works lb. .39 - .40
Trichloride, dms., c.l., works lb. .14 - —
t.c.l. works lb. .15 - —
tankcars, works lb. .12½ - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
t.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½ - —
Phthalimide, 97%-98% dms., frt. equald lb. .65 - —
Phthalylsulfacetamide, 1,000-lb. tots or more lb 5.00 - —
NF lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald .43 - .43½
l.c.l., works, frt. equald .44 - —
tanks, same basis .415 - .422
b,g-Picoline 5°C. dms. c.l., works lb .32½ - —
t.c.l. works lb .33 - —
g-Picoline 98% dms. works lb. 2.00 - —
Pilocarpine hydrochloride, USP, bots oz 4.75 - 5.25
Nitrate, USP bots. vials oz. 4.65 - 4.75
Pimento, Jamaican, bgs lb. .72 - —
Mexican, bgs lb. .36 - —
Pink root, bls lb 2.50 - —
Piperazine, crude, dms. c.l. works. lb. 3.00 - —
l.c.l., works lb. 3.05 - —
Citrate, 100 lb. lots lb. 2.50 - —
Hexahydrate, French Codex bots. 100 lb. lots lb. 2.00 - —
Piperidine dist dms frt equald lb 2.60 - 2.70
Piperonyl butoxide dms dlvd E lb 4.50 - 5.05
Cyclonene, dms., dlvd. E lb. 3.70 - 4.25

Pitch, coaltar, bulk, aluminum, works ton. 40.00 - 42.00
carbon and industrial, works. ton. 40.00 - —
core, works ton. 36.50 - —
fiber, works ton. 44.00 - —
roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton. 39.00 - —
Cottonseed, raw, dms., works lb. .03 - .03¼
tanks, same basis lb. .02¾ - —
Linseed dms lb. .06 - .06¾
Marine, dms lb. .04¼ - .05
Petroleum (see Asphalt petroleum)
Soybean, dms., works lb. .05 - .05½
Tall, dms., c.l., works ton. 50.00 - 70.00
tanks, works ton. 30.00 - 40.00
Plaster of Paris (see Gypsum)
Platinum metal, works oz. 98.00 - 101.00
Pleurisy root bls lb 45 - .50
Podophyllum resin, NF, dms lb. 15.60 - 16.10
Poke root, bls lb. .19 - .22
Polymyxin, bulk, bots., dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots, works. lb. .46 - .48

Polyoxyethylene tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb. lots, works. lb. .43 - —
smaller lots works lb 46 - 48
Poppy seed, Argentine, bgs lb 24 - —
Dutch, bgs lb. .28 - —
Iranian bgs lb 14½ - 15
Polish, bgs lb. .27½ - —
Turkish bgs lb .24 - —
Potash caustic reg. flake 88-92% dms. c.l. works 100 lbs 9.15 - —
l.c.l. works 100 lbs. 10.20 - —
liq., 45% basis dms c.l. works 100 lbs 4.25 - —
t.c.l. same basis 100 lbs 5.05 - —
tanks same basis 160 lbs 3.70 - —
solid, 88-92%, dms., c.l., works, 100 lbs. 8.70 - —
t.c.l. works 100 lbs 9.75 - —
Potassium acetate NF dms lb 31 - .38
Bicarbonate USP gran. dms lb 22 - —
powd. dms lb 24 - —
Bichromate gran. bgs., c.l., t.l., works lb. .18 - —
t.c.l. works lb. .18½ - 19¼
Potassium bichromate in dms. ¾c. higher.
Bitartrate, NF, dom., gran. or powd. bbls. 5,000 lbs. 1 ship't lb. .40½ - —
dms., c.l lb. .40 - —
smaller lots lb. .41 - .43
imp., kgs lb. .33½ - .37
Bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
smaller lots, works lb. .52 - .62

HARSHAW DRIERS

Comply with the Strict Tolerances Needed for Highest Quality



Harshaw's precise manufacturing specifications demand the following tests for every batch of driers produced:

- Metal content
- Specific gravity
- Color
- Viscosity
- Total solids content
- Flash point (TCC)
- Moisture content
- Acid value
- Miscibility with raw linseed oil
- Miscibility with mineral spirits
- Benzene insoluble content
- Customer's specified tests

Order your next requirement of driers from Harshaw. They are produced and tested at our plant in Gloucester City, N. J. where we have the most modern facilities available. Harshaw Driers are distributed nation-wide through 18 stock points.

TYPICAL HARSHAW DRIERS

LIQUID DRIERS
- Uversol (Naphthenate) Liquids
- Linoresinate Liquids
- Linoleate Liquids
- Lithos
- Octasols
- Pastes
- Pastalls

SOLID DRIERS
- Uversol (Naphthenate) Solids
- Linoresinate Solids
- Linoleate Solids
- Soyate Solids
- Fused Resinates

POWDERED DRIERS
- Precipitated Resinates
- Drying Salts:
  - Cobalt
  - Lead
  - Manganese
  - Zinc

THE HARSHAW CHEMICAL CO.
1945 East 97th Street, Cleveland 6, Ohio
BRANCHES IN PRINCIPAL CITIES

Potassium Bromide—Quinoline

Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40
Carbonate, NF, gran., bbls., dms. lb. .20 - —
powd. bbls. dms lb 21 - .22
tech. calcined, bbls., c.l., works. 100 lbs. 9.00 - —
c.l. same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
t.c.l., works 100 lbs 8.65 - —
Chlorate cryst. dms. c.l. works. lb. .11¼- —
t.c.l. works lb. .11½ .12½
powd., dms., c.l., works lb. .11¾- —
t.c.l. works lb. .12 - .13
NF, gran. 25-lb. metal dms lb. .36 - —
Chloride, agricultural, (see Potassium muriate).
indust 99.9% KCl bulk, c.l., works ton 29.00 - —
bgs., c.l., works ton 33.50 - —
99.3% KCl bulk c.l. works ton 27.00 - —
bgs., c.l., works ton 31.50 - —
USP, cryst., dms lb 21 - .23
gran., dms lb .15 - .17
powd. dms lb 24 - .26
Chromate, tech., bgs. lb .50 - .50½
Citrate, USP, gran., dms. lb. .43 - —
powd., dms lb 40½ .41½
Cyanide dms. 20,000-lb. lots or more works lb. 45 - —
2,000-19,999-lb lots works lb 455 - —
smaller lots, works lb 465 - —

Potassium dichromate (see Potassium bichromate).
Ferricyanide, dms., ton lots, works. lb. .50 - —
smaller lots, works lb. .65 - —
Ferrocyanide, bgs., ton lots lb. .23 - —
smaller lots lb. .23½- —
Fluoborate fib dms. c.l., works lb .30 - —
t.c.l., works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms lb. 1.62 - —
Guaiacolsulfonate, NF, dms lb 2.10 2.30
Hydroxide, tecn. (see Potash caustic).
USP pellets 100-lb. dms. 1 to 100-dm. lots lb. .33½- .38
Hypophosphite, NF, fib. dms., 1,000-lb. lots lb. 1.38 - —
Iodide, dms lb 1.90 - 1.95
Manure salt, 22% K_2O, bulk, c.l., works unit-ton. .17 - .1765
Metabisulfite, gran., dms lb .20 - .21
powd., dms lb. .25 - —
Muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price unit-ton. .36 - —
July forward unit-ton .38 - —
granular, 60-63% K_2O, bgs. c.l. works, base price ton 26.25 - —
July forward ton 27.45 - —
Nitrate, NF, cryst. bbls., 20-ton lots 100 lbs.16.50 - —
smaller lots 100 lbs.17.50 -18.00

Potassium nitrate, gran., bgs., 20-ton lots 100 lbs. 9.25 - —
smaller lots 100 lbs.10.50 -11.00
powd., bgs., 20-ton lots 100 lbs.10.25 - —
smaller lots 100 lbs.11.50 -12.00
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .31
Pentaborate, gran., bgs., c.l., works. ton.191.50 - —
dms., ton lots ex whse ton.302.00 - —
smaller lots ex whse ton.307.00 - —
Powdered potassium pentaborate $10.25 per ton higher
Perchlorate, dms., c.l., works lb. .18½- —
t.c.l., works lb. .19 .20
Permanganate, coml. kgs. works. lb. .26 - .29
USP, dms., works lb. .29¼- .31
Persulfate, dms., c.l., works lb. .17½- —
t.c.l., works lb. .18 - .21
Pyrophosphate tetrabasic, dms., works lb. .15½- .18½
Prussiate red (see Potassium Ferrocyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass bgs., c.l. works. 100 lbs.17.00 -17.30
t.c.l., works 100 lbs.17.80 - —
soln., clarif. 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
t.c.l., 5 dms. or more works 100-lbs. 6.55 - 6.95
tanks, works 100-lbs. 5.45 - —
electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
t.c.l., 5 dms or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —

Potassium silicate, electrical, 40.5° Be, 1:2.1, dms., c.l., works. 100 lbs. 6.45 - —
t.c.l., 5 dms. or more works 100 lbs. 7.20 - 7.60
tanks, works 400 lbs. 6.10 - —
Silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb higher
Stannate, dms., frt. alld. E lb. .776 - .848
Sulfate, agricultural, 50% K_2O, bulk, works, base price. unit-ton. .64 - —
July forward unit-ton. .67 - —
Sulfate, NF VII, cryst., dms lb. .31 - .33
gran., dms lb. .18½- —
powd., dms lb. .16 - .17
Sulfocyanate, NF, cryst., (see Potassium thiocyanate).
Thiocyanate, NF, cryst., dms., works. lb. .84 - .94
tech., dms., works lb. .77 - .79
Titanate, ctns., c.l., works lb. .16¼- —
5-ton lots, works lb. .16½- —
1-ton lot or less, works lb. .16¾- —
Toluene sulfonate dms., c.l., or t.l. works lb. .42 - —
t.c.l. works lb. .46 - —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO base price ton.13.45 - —
July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. powd., dms., c.l lb. .42½- —
5,000-lb. lots lb. .43 - —
smaller lots lb. .43½- .49
Potassium-titanium fluoride, fib. dms, works lb. .39 .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 - —
t.c.l., works lb. .52½- .55
Pregnenolone, bots. gram. .45 - —
Acetate, bots gram .40 —
Procaine hydrochloride, USP, dms. 1,000-lb lots, frt. alld lb. 2.83 - —
100-500-lb. lots lb. 2.95 3.15
Progesterone USP bots., 100 gram lots gram .50 - —
Acetate, bots. gram .70 - —
Propane, indust. tanks, group 3 gal. .05 - —
N. Y. Harbor gal. .093 - —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¼- —
t.c.l., dlvd lb. .15¼- —
tanks, dlvd lb. .11¾- —
Gallate dms. 100 to 2,000-lb. lots, works lb. 3.90 4.40
p-Hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil bots., 50-kilo lots or more kilo.55.00 —
smaller lots kilo.55.10 -55.30
Propylene dichloride, consumers, dms., c.l., dlvd E lb. .0845- —
t.c.l., same basis lb. .0950- —
tanks same basis lb .07 —
Propylene dichloride prices in West 1c higher dlvd. on same basis.
Glycol, indust., dms., c.l., dlvd. E. lb. .16 - —
t.c.l. same basis lb. .17 - —
tanks, same basis lb. .13½- —
USP, dms., c.l., dlvd. E lb. .18 - —
t.c.l., same basis lb. .19 - —
tanks, same basis lb. .15½- —
Methyl ether dms., c.l., dlvd lb. .20 - —
t.c.l. same basis lb. .21 - —
tanks, same basis lb. .18½- —
Oxide, dms., c.l., dlvd E lb. .18 - —
t.c.l., dlvd. E lb. .19 - —
tanks, dlvd E lb. .16½- —
Psyllium seed, black, bgs lb. .28 - .30
blonde, bgs. lb. .18 - —
husks bgs lb. .40 —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝ .04¼
smaller lots lb. .03⅞ .04½
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs. ton lots lb .04 —
sun dried coarse, bgs ton.58.00 —
fine, bgs ton. No Prices
Pumpkin seed, bgs lb .25 .26
Pyrethrin, syn. (see Allethrin)
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
powd., 1.3% pyrethrins, bbls., works lb. .65 - —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 - 8.85
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal.41.75 -42.75
oleoresin, dewaxed, 20%, dms., works lb.10.00 —
purif., 20% dms., works lb.10.00 -10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal 2.77 - —
t.c.l., same basis gal. 2.80 - —
refd., 2°, non-ret dms., t.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .29½- —
Pyrites, Canadian, 48-50% S, works. long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallol, NF, 100 lb. dms lb. 3.50 - —
Pyroxylin scrap, ungrd., amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed mottled dms., works lb. .13 - —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 —
white, china, ivory, dms., works lb. .16 - —
dense opaque, dms. works. lb. .12 - .15
translucent pastels, cs., works. lb. .14 - —
colors, dms., works lb. .16 - —
USP bots lb 9.50 - —

Q

Quassia chips lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin bgs., works. lb. .16½- .17
liq., 35% tannin bbls., works. lb. .08¼- .08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .107429 —
ord., 63% tannin, bgs., c.l., same basis lb. .098035 —
Quercitron extract cryst., No 1, bbls., t.c.l. lb. .40 - —
liq., No 1, bbls. t.c.l lb. .19 - —
Quicksilver (see Mercury metal)
Quince seed bgs lb 2.00 Nom.
Quinidine sulfate USP cns., 100-oz. lots oz. .73 - .75
Quinine, NF, cns. 100-oz. lots oz. .54 - —
Bisulfate USP cns. 100-oz lots. oz. .37½- —
Hydrochloride cns. 100-oz. lots. oz. .35 - .47½
Sulfate, USP, cns. 100-oz. lots oz. .29 - .35
Quinoline dms. c.l. frt. equald lb. .50¾- —
t.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

Manufacturers of insecticides, cleaning compounds, cosmetics—and dozens of other products made with surfactants—rely on Atlas for down-to-earth help in their formulating work.

For example, here are the 4 Atlox formulating tools offered by Atlas to help agricultural insecticide formulators cut formulating time, reduce ingredient costs and inventories, improve quality control, and broaden sales areas:

1. ***Guide to Emulsifier Selection***—book showing how to use two new Atlox emulsifiers in all formulas containing chlorinated hydrocarbon insecticides and common solvents. *Delivered personally by Atlas representative to volume formulators.*
2. ***Field Evaluation Charts***—to guide chemists in duplicating field conditions in the lab.
3. ***Suggested Test Methods***—a booklet and movie on "Pesticidal Emulsion Testing" to help make formulation work easier, faster, more accurate.
4. ***Formulation and Evaluation Service***—experienced Atlas lab assistance, available to formulators for special problems.

If you have problems involving emulsification, wetting, detergency or other surfactant applications, we'd welcome an opportunity to help. Write us or give us a phone call.

ATLAS SERVES THESE INDUSTRIES—

Cleaning compounds	Paints
Confections	Plastics
Cosmetics	Pharmaceuticals
Edible oils & fats	Petroleum
Herbicides	Textile specialties
Insecticides	. . . and many others

CHEMICALS DIVISION
ATLAS POWDER COMPANY
WILMINGTON 99, DELAWARE
In Canada: Atlas Powder Company, Canada, Ltd. Brantford, Ontario, Canada

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U.S.I. CHEMICAL NEWS

March ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1957

Trimethyl and Triethyl Aluminum Piloted by U.S.I.

Trimethyl and triethyl aluminum, highly flammable liquids which ignite spontaneously in air, are now being produced by U.S.I. in pilot plant quantities. At present they are being tested as ignitors and fuels for ram jet and turbo jet engines, and also show possibilities as polymerization catalysts, and intermediates for chemical synthesis.

A sodium-based process is used to synthesize these two materials in the pilot plant, a process which can be used to produce them in commercial quantities as well. It is predicted that the commercial price will range between $2 and $5 per pound, although the price in pilot quantities is considerably higher.

Also available from the pilot unit is methyl aluminum sesquichloride, a mixture of methyl aluminum dichloride and dimethyl aluminum chloride. This product too may find use as a catalyst or chemical intermediate.

Alcohol and Chemical Sales Now Under Johnson

Warren E. Johnson has been named Manager of Alcohol and Chemical Sales for U.S.I. Mr. Johnson has been with the U.S.I. sales organization since 1940. He became Manager of the Boston Sales Division in 1944 and Manager of U.S.I. Chemical Sales in 1950. With this change, Mr. Johnson becomes responsible for industrial alcohol sales in addition to his previous product responsibilities. U.S.I. alcohol sales had formerly been under Alden R. Ludlow, Jr., who was recently named Director of Sales for the company.

Byck Appointed Manager of U.S.I. Heavy Chemical Sales

Lawrence C. Byck, Jr., has been named Manager of Heavy Chemical Sales for U.S.I. He has been assistant to the Manager of Chemical Sales during the past four years, and has been with the U.S.I. organization since 1945, in research and technical liaison positions as well.

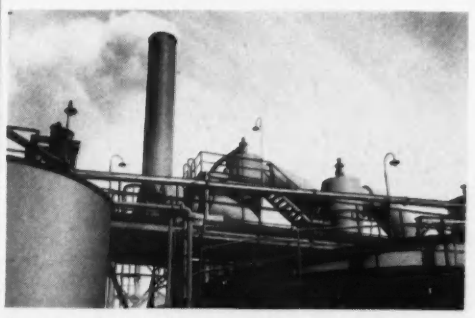
In his new position, Mr. Byck will be responsible for sales of ammonia, nitric acid, and nitrogen solutions from the U.S.I. synthetic ammonia plant at Tuscola, Illinois. He will also be responsible for sales from U.S.I.'s three plants at Tuscola, Illinois, Dubuque, Iowa and Sunflower, Kansas, and for sales of phosphoric acid from U.S.I.'s newly completed wet-process plant at Tuscola.

U.S.I. Phosphoric Acid Plant At Tuscola is Now Onstream

Plant is First in Country to Produce Wet-Process Acid Exclusively for Solid Fertilizer Industry

Thirty thousand tons per year of phosphoric acid (measured as P_2O_5) are now being produced at U.S.I.'s new Tuscola, Illinois plant. The bulk of the acid is expected to be used by solid fertilizer manufacturers in the Mid-west, making this the first wet-process phosphoric acid plant in the country to produce for non-captive consumption only. Availability of phosphoric acid in this area answers the need for a rich source of phosphorus, a need which has become evident with the trend toward high-analysis plant foods.

In the plant, insoluble phosphate rock is digested with spent sulfuric acid from the neighboring facilities of National Petro-Chemicals Corporation, a subsidiary of U.S.I. Calcium sulfate is filtered off and the resulting phosphoric acid is concentrated and marketed as a fertilizer raw material.



Section of U.S.I.'s new phosphoric acid plant.

With the completion of this plant, U.S.I. now makes ammonia, nitrogen solutions, sulfuric acid, and phosphoric acid at Tuscola. Because this area is the site of an integrated chemical center, the company feels that it can also manufacture other fertilizer raw materials if the demand becomes evident.

MORE

April 8-12 Set for 4th Chemical Progress Week

The Manufacturing Chemists Association (MCA), national sponsor of Chemical Progress Week, reports that industry support for the program is greater this year than ever before.

Chemical Progress Week was inaugurated in 1954 as a nationwide effort on the part of the Chemical Process Industries to acquaint the American public with the importance of chemistry and the chemical industry in daily life.

As has been the case in previous years, the working organization behind Chemical Progress Week is manned by volunteers from the industry. Last year some 1,500 participants were listed at National Headquarters and it is believed that approximately 7,500 additional people took an active part in implementing the program.

National Headquarters has prepared a wide range of materials and suggestions for participating companies to present to the public. Included are literature, displays, ads, radio and TV material, speeches, films, publicity releases and sample proclamations to be made by state governors.

Complete kits of ideas, samples and order forms can still be obtained from MCA, 1625 Eye Street, N.W., Washington 6, D. C.

New, Low-Cost Process for Separating Zirconium and Hafnium Acquired by U.S.I.

U.S.I. has taken an exclusive option on a new process for separating hafnium from zirconium chloride, developed by the Commonwealth Scientific and Industrial Research Organization of Australia. The separation is necessary where zirconium is to be used in atomic energy installations, since hafnium impurities destroy the excellent nuclear properties of zirconium.

Now in pilot plant stage at U.S.I.'s Cincinnati research laboratories, the process has been found to reduce considerably the cost of separating the two metals. It eliminates the series of cumbersome chemical extraction steps which other methods in current and projected operation employ.

U.S.I. is currently building a zirconium sponge plant in Ashtabula, Ohio, scheduled to come on-stream during the second quarter of 1957.

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared by U. S. Industrial Chemicals Co.*

March ★ **U.S.I. CHEMICAL NEWS** ★ 1957

CONTINUED

Phosphoric

Sodium Silicofluoride Produced

Sodium silicofluoride is manufactured as a by-product of the phosphoric acid process. This material is used in fluoridation of municipal water supplies and is also employed by the chemical process industries in the manufacture of enamel frits and laundry sours.

Giant filter is heart of phosphoric acid process at U.S.I.'s new Tuscola, Ill. plant.

New Cancer Studies Show Tumor Growth Reduced by Methionine and Cystine

Researchers investigating the biochemistry of cancer report that methionine and cystine, two sulfur amino acids, have been used to reduce the growth of sarcoma R-1 in experimental animals maintained on sulfur deficient semi-synthetic diets. These compounds also increased body weight as normal tissue, raised food efficiency, as well as increasing the difference in the ratio of normal tissue weight to weight of the tumor.

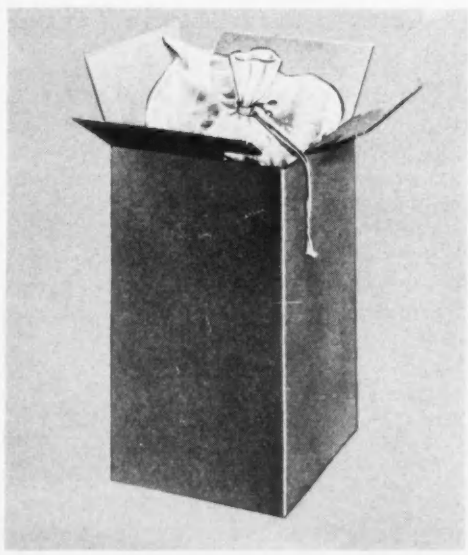
When guanidoacetic acid (glycocyamine) or glycine were used as further supplements, the addition of methionine overcame the toxicity of glycocyamine and brought about increased food efficiency and a favorable change in the ratio of body weight to tumor weight. The mixture of methionine and guanidoacetic acid was particularly effective in conserving body nitrogen under stress conditions such as the large sarcoma or toxic chemotherapeutic agents.

New Type Polyethylene Film Permits Packaging Liquids In Cardboard Containers

A new pinhole-free type of polyethylene film for liners has just been announced which will make it possible to ship liquid, semi-solid and anhydrous products in bags and boxes as well as drums and barrels. It is claimed that the new film gives positive protection against leakage.

The film is made by fusing together two simultaneous draws of polyethylene while the surfaces are still molten. Since it is almost impossible for pinholes or minute weaknesses to occur in exactly corresponding positions in each of two separate films, the result is a strong, moisture-proof material.

Pinhole-free polyethylene has great possibilities as a lining material for all types of shipping containers—to transport chemicals, dairy products and many other items.



This new container combines a pinhole-free polyethylene bag and a corrugated box. Containers of this type should be of interest for packaging liquid chemical specialties.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing the Editor, U.S.I. Chemical News.

New "blackboard" radiographic method is claimed to be fast and low-cost for industrial x-ray work. Advantages cited include: dry process, reusable plates, detailed images, and 20 to 45 seconds exposure-to-viewing time. **No. 1210**

Paint formulas are featured in new 46-page booklet on pigment extenders, flatting agents and filter aids. Presented on individual, 3-hole punched sheets are 24 formulas for solvent-thinned paints and 17 for water types. **No. 1211**

Imported crystal lattice models now distributed here have angles and dimensions based on data obtained by x-ray and electron diffraction. Linear scale is one Angstrom per 25 mm. Spheres have 20 mm diameter, are varied colors. **No. 1212**

Chemicals which can be piped through flexible polyethylene are charted in an 8-page bulletin on this type of piping. Also covered are properties of polyethylene pipe, sizes, estimated flow rates and installation procedures. **No. 1213**

New arsonosiloxanes are claimed to combine the water-repellent properties of conventional silicones with the fungicidal and pesticidal properties of arsenicals. Suggested for use as water-repellent insecticides. **No. 1214**

Chemically-modified fats known as acetoglycerides have been prepared and patented by the USDA. Some are flexible, wax-like, non-greasy in feel — show promise in foods, plasticizers, cosmetics, lubricants. Process can be licensed without cost. **No. 1215**

New one HP homogenizer said to do jobs usually entrusted to 3 to 5 HP models is now on the market. Designed to process about 1000 lbs. per hour of semi-pastes or other viscous materials up to 30,000 cps, at 3600 rpm. **No. 1216**

An index of all isotopes available commercially, and their sources, can be purchased as a 64-page book listing over 2000 items. Included are stable and radioactive isotopes and hundreds of isotope-labeled compounds. **No. 1217**

1,1,1-Trichloroethane in reagent grade is now available as high-safety chlorinated solvent for the laboratory. Suggested as substitute for chloroform or carbon tetrachloride in dithizone tests for metals because of low toxicity. **No. 1218**

o-Nitrophenyl-beta-D-galactoside of especially high purity can now be obtained which permits a dependable, simple assay of the activity of galactosidase used in studies of protein synthesis. **No. 1219**

PRODUCTS OF U.S.I.

INORGANIC CHEMICALS:

Sodium, Metallic: cast solid in tank cars, steel drums, pails; bricks in barrels, pails.
Chlorine: liquid, in tank cars.
Caustic Soda: 50% liquid, in tank cars.
Sodium Peroxide: dust-free granules, in drums.
Sodium Sulfate
Sulfuric Acid: all strengths, 60° Baumé to 40% Oleum. Also Electrolytic grade to Federal specifications. Tank cars or tank wagons.
Phosphoric Acid
Ammonia: Anhydrous, commercial and refrigeration. Tank cars or tank wagons.
Nitrogen Fertilizer Solutions
Ammonium Nitrate: 83%

OTHER PRODUCTS:

Alcohols: Ethyl (pure and all denatured formulas), Normal Butyl, Amyl, Fusel Oil; Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL® PR.
PETROTHENE® Polyethylene Resins.
Esters, Ethers and Ketones: Normal Butyl Acetate, Dibutyl Phthalate, Diethyl Carbonate, Diethyl Oxalate, Ethyl Acetate, Ethyl Ether, Acetone, Diatol®.
Intermediates and Fine Chemicals: Acetoacetarylides, Dimethyl Hydrazine, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Chloride, Ethyl Sodium Oxalacetate, U.S.I. ISOSEBACIC® Acid, Methyl Hydrazine, Sodium Ethylate Solution, Triethyl Aluminum, Trimethyl Aluminum, Urethan USP (Ethyl Carbamate).
Animal Feed Products: Calcium Pantothenate, Choline Chloride Products, Curbay B-G® 80, Special Liquid Curbay®, DL-Methionine, Niacin USP, Riboflavin Concentrates, Vitamin B_{12} and Antibiotic Feed Supplements, Vacatone® 40, Vitamin A, D_3 and K_3 Products, Antioxidant (BHT) Products, Special Mixes.
Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Riboflavin USP, Urethan USP, Intermediates.
Metals: Titanium Sponge, Zirconium Sponge, Zirconium Platelets, Hafnium Oxide, Hafnium Sponge.

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers Products Corporation
99 Park Avenue, New York 16, N. Y.

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R

R salt, paste, dms., frt. alld., 100% basis lb .88 - —
powd., frt. alld. 100% basis lb. .98 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.75 - —
Red, BON acid maroons, pure, bbls., lb. 1.75 - —
resinated, bbls lb 1.50 - —
arylid, deep shades, bbls. lb. 3.70 - —
light shades, bbls lb. 2.85 - —
maroon, bbls lb. 3.70 - —
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 - —
light shade bbls. same basis. lb. 4.00 - —
medium shade, bbls., same basis lb. 4.25 - —
medium light shade, bbls., same basis lb. 4.05 - —
orange shade, bbls., same basis lb. 3.95 - —
orange red bbls. same basis. lb 1.81 - —
Selenide lithopone, maroon shade, bbls., same basis. lb. 3.77 - —
dark bbls. same basis. lb. 3.90 - —
red shade, dark, bbls., same basis lb. 3.44 - —
light, bbls. same basis. lb 2.24 - 2.32
medium, bbls., same basis. lb. 2.99 - —
medium light, bbls., same basis lb. 2.49 - —
Mercury lithopone, dark shade, bbls., same basis lb. 2.40 - —
light shade bbls same basis. lb. 1.95 - —
medium shade bbls., same basis lb. 2.25 - —
medium light shade, bbls., same basis lb. 2.10 - —
Carmine, No 40 (see Carmine).
Dyes (see Dyes coaltar)
Eosin toner, bbls., works . lb. 1.75 - —
Indian, dom., pure, bgs., Bethlehem Easton E St Louis, N Y lb. .12¾- —
Iron oxide, nat., 75-85% ferric oxide bgs. l.c.l. Bethlehem Pa., Copley, O., Easton, Pa., bgs. c.l. works lb. .0675- —
Lake C toner, alizarine, bbls., works lb. 1.20 - —
Lithol toner, bbls., works lb. .93 - —
rubine toner pure bbls. works. lb. 1.50 - —
resinated, bbls., works lb. 1.40 - —
Virginia type bbls., works lb. 1.40 - —
Maroon toner, MNPT kgs., c.l., works lb. 3.80 - —
Mercury oxide, tech. c.l. works. lb. 5.77 - —
Metallic, bbls., c.l., works lb. 02½- —
l.c.l., works lb 02¾- —
Naphthol, ITR, bbls., works lb. 5.50 - —
Oxide (see Red iron oxide).
Persian Gulf bgs. c.l. works. lb. .07¾- —
l.c.l. works lb. .08 - —
Para toner bbls lb. 1.15 - —
chlorinated, kgs lb. 1.30 - —
Phloxin toner (see Red eosin toner)
Rhodamine, molybdated, PMA, kegs lb. 5.80 - —
tungstated, PTMA works kegs lb. 6.60 - —
Spanish oxide, bbls., c.l., ex-dock. lb. .05¾- —
l.c.l., ex dock lb. .06 - —
eg whse, New York lb 06½- —
Toluidine toner, deep shades, kgs., works lb. 1.70 - —
light shades, kgs. works lb. 1.70 - —
Turkey, bbls., works lb. .62 - —
Tuscan, bbls., frt. equald lb. .26 - .32
Venetian, jobbing, bgs., works lb. .0475- —
lb. .0475- —
20%, bgs. works lb. .0525- —
25%, bgs., works lb .0575- —
30%, bgs., works lb. .06 - —
35%, bgs., works lb .0625- —
40%, bgs. works lb .0675- —
Watchung-type, bbls lb. 1.95 - —
Red KB base (see 4-Chloro-2-aminotoluene).
Red precipitate (see Mercuric oxide red)
Red saunders NF powd. bbls lb .35 .40
Reserpine, cryst., bots. gram. 2.40 - —
Resorcinol, tech. grade, dms., c.l., works, frt. equald lb. 77½- —
l.c.l., same basis lb. 78½- —
USP, dms., works lb 2.75 - —
powd., dms., works lb 2.95 - —
Monoacetate, NF dms. lb 3.00 3.25
Rhatany root bgs lb .15 .16
Rhodinol, 5-lb cans lb. 32.00 -36.00
Rhubarb root, India, whole, bgs. lb. .30 - —
powd., bbls lb .38 - —
Riboflavin, USP, bots., dlvd kilo. 65.00 - —
readily soluble, bots., dlvd kilo. 130.00 - —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo. 125.00 - —
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Pitch coaltar roofing)
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works, unit-lb. .12 - —
resin, 25-45% fib dms. works, unit-lb. .12 - —
Rottenstone bgs. 5-ton lots ex-whse lb. .03¾- —
ton lots, same basis lb .04¼- —
Rutin, NF, fib, dms., 10 kilo lots. kilo. 17.00 - —
5 kilo lots kilo. 17.50 - —
1 kilo kilo. 18.50 - —
Ryania, 100% powd. bgs., c.l., works lb. .22 - —
l.c.l. same basis lb. .24 - —

S

Sabadilla seed, powd., bbls lb. .49 - 49½
activated, ground with lime, bbls. lb. .30 .32
Saccharin USP cryst., soluble, dms., 1600-lb lots lb. 1.60 —
smaller lots lb. 1.70 1.80
powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 - —
smaller lots lb 1.75 1.95
Calcium, fib dms 1,000-lb lots, works lb 2.50 —
Saffron, Spanish, USP tins lb 45.00 —
Safrol, dms lb .90 1.05
Sage, Cretan bgs lb 11 —
Dalmatian bgs lb 44 —
Italian lb 26 Nom
Sago flour, raw bgs lb 07 07¼
refd. bgs lb 08½ .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms lb. 1.05 - 1.15
Salol, NF, gran., bbls., kgs lb. 1.20 - —
Powdered salol 25c higher
Salt, rock, paper bgs., c.l 100 lbs. 1.07 - —
table, vacuum common fine, paper bgs., c.l. 100 lbs. 1.32 - —
Saltcake, dom., bulk, works, 100% Na2SO4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies chips bgs. .65 - .66
powd., fib. dms lb. .75 - .76
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .95 - —
powd. bgs. frt. alld. 100% basis. lb .95 - —
Scopolamine hydrobromide, USP bots oz. 13.50 -16.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. 30½- —
smaller lots lb. .31 .32
Selenium, powd. 99½%, dms., dlvd. lb. 12.00 - —
Senega root, bls lb. 2.90 - 3.00
Senna leaves, Alex. whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .16 - .18
No 2 bls. lb. .13 - .15
No. 3, bls lb. .11 - .13
powdered, bbls., bxs lb. .15 - —
pods bls. lb 14 - —
Serpentaria, root, bls lb. 7.50 - —
Sesame seed, Egyptian, hulled, bgs. lb. .22½- —
nat., bgs. lb. .17 - —
Nicaragua, hulled, shipt., bgs. lb. .25 - —
nat., bgs lb. .16½- —
Salvadorian, natural, bgs lb. .21½- —
Indian, natural, bgs. lb. N.P.
Shellac, bleached bonedry, bgs., 2,500-lb. lots lb. .52 - —
bbls., 1,500-lb lots lb. .53 - —
kgs., 1,500-lb lots lb. .54 - —
refd., bgs., 1,500-lb. lots lb. .62 - —
bbls., 1,500-lb. lots lb. .63 - —
kgs., 1,500-lb. lots lb. .64 - —
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.
Shellac, lemon, No. 1, bgs., 10-bg. lots lb. .41 - .42
No. 2, bgs., 10-bg. lots lb. .39 - —
Superfine, bgs., 10-bg. lots lb. .38 - —
TN, bgs., 10-bg. lots lb. .37 Nom.
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil (see Oil shingle stain)
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton. 25.00 —
l.c.l. works, exwhse ton. 45.00 -55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton. 20.00 —
l.c.l., works ton. 25.00 -30.00
140 mesh bgs. c.l., works ton. 15.00 - —
l.c.l. works ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
l.c.l. works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅜- —
Cyanide fib dms., 2,500-oz lots. oz. .87 - —
1,000-oz. lots oz. .87⅜- —
500-oz. lots oz. .87½- —
100-oz. lots oz. .87¾- —
Nitrate, CP cryst., bots., 2,500-oz. lots oz. .62⅜- —
1,000-oz. lots oz. .63½- —
500-oz. lots oz. .64¼- —
250-oz. lots oz. .64⅝- —
USP granular silver nitrate 4c. per oz higher.
Proteinate mild USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
strong NF bots. dms. 1,000 oz. lots oz. 1.10 - —
Soapbark, whole, bls lb .38 .40
crushed bls bbls lb .45 —
powd bbls lb .45 —
Soda ash, dense 58% paper bgs., c.l. works 100 lbs 1.90 —
l.c.l. stock points 100 lbs 3.00 4.77
bulk, c.l. works 100 lbs 1.60 —
light, 58% paper bgs., c.l., works 100 lbs 1.85 —
l.c.l. stock points 100 lbs 3.95 4.72
bulk, c.l., works 100 lbs 1.55 —
Soda caustic flake 76% dms., c.l., works, frt. equald 100 lbs. 4.70 - —
liq., 50% sellers tanks, works, dry basis 100 lbs. 2.90 - —
rayon type, sellers, tanks, works, dry basis 100 lbs 2.90 3.00
73%, sellers, tanks, works, dry basis 100 lbs. 3.00 - —
rayon-type sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works. 100 lbs. 4.30 - —
Sal. conc., bgs., c.l., works. 100 lbs. 2.50 - —
smaller lots, works 100 lbs 2.80 - —
Sodium acetate anhyd. bgs., c.l., frt. equald lb. .13 —
dms., l.c.l., frt. equald lb. .13¾- —
NF, 60% gran dms., c.l., works lb. .14 —
l.c.l. works lb. .15½- —
Alginate NF white powd., dms., 300 lbs. or more lb. .93 - —
p-Aminobenzoate, dms. 1,000-lb. lots or more lb. 2.35 - —
smaller lots lb. 2.45 - 2.55

This man helps move 175 carloads of caustic at a time

(He's a deck officer on the Marine Dow-Chem)

After a few terse commands from the bridge, the 18,000-ton *Marine Dow-Chem* glides silently into the night. With her cargo of vital chemicals the *Dow-Chem* plies her way to key Dow terminals. In her storage tanks there is enough caustic soda to fill 175 tank cars.

Typical of the foresighted Dow attitude of solving a problem before it arises, the *Dow-Chem* was commissioned in 1954 with an eye to the future needs of industry. Today, this specially equipped ship is an important part of our vast distribution system.

As demand increases, Dow will continue to lead the way in developing new methods to deliver caustic soda to your doorstep in any form or quantity. THE DOW CHEMICAL COMPANY, Midland, Mich., Dept. AL 600A-1.

YOU CAN DEPEND ON DOW

Sodium p-Aminosalicylate—Sodium Silicofluoride

Sodium p-aminosalicylate, dms., 100 lbs. or more, frt. adjusted	lb.	2.70	3.75
Antimoniate, bbls. c.l., dlvd E.	lb.	.28	—
t.c.l., dlvd. E	lb.	.29½	—
Arsenate, 45% arsenic pentoxide, dms., c.l., works	lb.	.12¼	—
t.c.l., works	lb.	13¾	.14½
Arsenite, 90%, pink powder, 75% arsenious oxide, dms., works	lb	12¼	—
t.c.l., works	lb	13	.14½
soln. dms. works	gal	59	.67
Ascorbate, dms., 25-50 kilo lots	kilo	12.00	—
10-kilo lots	kilo	12 35	—
5-kilo lots	kilo	12 75	—
1-kilo lots	kilo	13 00	—
bots. 500-gram lots	kilo	13.50	—
Benzoate, tech., bbls., dms., lots or more	lb.	.39	—
USP bbls. dms. 100-lb lots. or more	lb	46	—
Bicarbonate, USP, gran. bgs., c.l., works 100 lbs		2.85	—
t.c.l., works 100 lbs.		3.85	—
powd., bgs. c.l., works. 100 lbs.		2.55	—
t.c.l., works 100 lbs.		3.45	—
Bichromate, gran., bgs., c.l., t.l., works	lb.	.13	—
t.c.l., works	lb.	.13½	.14¾
Bifluoride, bbls. c.l. works, frt. equald	lb.	.19½	—
t.c.l., same basis	lb.	.1990	—

Sodium bisulfate, bulk, c.l., works. 100 lbs		2.00	—
dms., c.l., frt. equald 100 lbs		3.00	3 60
t.c.l. frt. equald 100 lbs		3 50	4 10
Bisulfite, anhyd. bgs. c.l. works. 100 lbs		5.00	—
t.c.l., works 100 lbs		5 40	—
soln., 35° bbls. c.l. works. 100 lbs		1.55	—
t.c.l. works 100 lbs		2.05	—
Borate (see Borax).			
Bromide, USP, bbls., works	lb.	.40	—
Carboxymethyl cellulose (see CMC)			
Carbonate, cryst., monohydrated (see Soda, sal).			
monohydrated, bgs. c.l. works. 100 lbs		3.10	—
t.c.l., works 100 lbs		3.50	—
Chlorate, cryst. dms., c.l. works. lb		09	—
t.c.l., works	lb	.09½	.10½
Chloride, tech. (see Salt).			
USP, gran., dms	lb.	.08	—
Chlorite, tech. dms. c.l., works. lb		58	—
20-ton lots or more works	lb	66	—
smaller lots, works	lb	70	73
Chloroacetate, tech., dms., c.l., works	lb.	.27	—
t.c.l., works	lb	28	—
Chromate, anhyd., fiber dms., c.l., t.l., works	lb.	14¾	—
t.c.l., same basis	lb.	.15¼	.16½
tetrahydrate, bgs., c.l., t.l., works	lb.	.1015	—
t.c.l.	lb	.1065	.1190

Sodium citrate, anhyd., dms	lb.	.62	—
NF VIII, gran., dms	lb.	.26½	.27½
USP, XIV gran., dms	lb.	.29½	.30½
Sodium citrate USP powd. prices higher.			½c
Cyanate, dms., 1,000-lb. lots, works. lb.		.85	—
smaller lots, works	lb.	.90	1.10
Cyanide, flake, 96-98%, dms., c.l or 20,000-lb. lots	lb.	.193	—
over 1,000-lb. lots	lb.	.203	—
100-lb. to 1,000-lb lots	lb.	.213	—
Granular sodium cyanide 1c higher			
Diacetate, 33-35% acidity, 250-lb. dms., works	lb.	.15	—
c.l., works	lb.	.15¾	—
anhyd., dms., c.l. works	lb.	.18	—
t.c.l. works	lb.	18¾	—
Ferrocyanide, bgs., 10-ton lots	lb.	.13½	—
smaller lots	lb.	.14	—
Fluoride, white, 97% fib dms., c.l. works, frt equald	lb.	.1390	—
t.c.l. works	lb	.1430	—
Formate bgs. c.l. works 100 lbs.		7 60	—
t.c.l. works 100 lbs.		8.65	—
Gentisate 100-lb fib dms	lb	3.50	—
Gluconate refd. dms	lb	80	.83
tech dms	lb	35	—
Hydride, dms., works	lb.	1.80	3.00
Hydrosulfide (see Sodium sulfhydrate)			
Hydrosulfite, dms., c.l., frt. alld. lb		.24	—
t.c.l. frt alld	lb.	.24½	—
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots	lb.	.23½	.28
technical (see Soda, Caustic)			
Hypophosphite, NF, dms., 1,000-lb. lots	lb.	.97	—

Sodium hyposulfite, anhyd., tech., bgs., c.l., works. 100 lbs.		7.25	—
t.c.l. works 100 lbs.		7.65	—
photo grade, bgs. c.l., works. 100 lbs.		8.05	—
t.c.l., works 100 lbs.		8 45	—
Hexahydrate, pea cryst., bgs., c.l., works 100 lbs.		5.15	—
t.c.l. works 100 lbs.		5.55	—
photo grade bgs., c.l., works, 100 lbs.		7.75	—
t.c.l., works 100 lbs.		8.05	—
Pentahydrate, tech., bgs., c.l., works 100 lbs.		5.15	—
t.c.l., works 100 lbs.		5.55	—
Iodide, USP, bots., dms lb.		2.55	—
Lactate, edible, 60%, cbys., dms., works lb.		.26½	—
Lauryl sulfate, dms. c.l. dlvd lb.		.19	—
t.c.l., dlvd lb.		.19½	.20¾
tanks, dlvd lb.		.18	—
Metabisulfite (see Sodium bisulfite)			
Metaborate octahydrate gran., bgs., c.l., works ton.		87.00	—
ton lots, ex whse ton.		143.00	—
smaller lots, ex whse ton.		148.00	—
tetrahydrate, dms. c.l., works. ton.		204.00	—
ton lots, ex whse ton.		242.50	—
smaller lots, exwhse ton.		247 50	—
Metallic bricks, 14,000-lb. lots or more, works lb.		.19½	—
fused, 14,000-lb lots, works. lb.		.19	—
tanks, works lb.		.17	—
Metanilate, bbls., frt. alld lb.		.62	—
Metasilicate, anhyd., bgs., c.l., works 100 lbs.		5.70	—
t.c.l. works 100 lbs.		6.15	8.10
dms., c.l 100 lbs.		6.20	—
t.c.l. 100 lbs.		6.65	8.55
Pentahydrate, bgs. c.l., works. 100 lbs.		4.45	—
t.c.l. works 100 lbs.		4.85	6.75
dms., c.l. works 100 lbs.		4.95	—
t.c.l. works 100 lbs.		5.35	7.25
Molybdate, anhyd., dms., works, frt. equald lb.		.92	.96
cryst. dms. works, frt. alld lb.		.73	.74
Monoglutamate (see Monosodium Glutamate).			
Monohydrate (see Sodium carbonate monohydrated).			
Naphthionate, bbls lb		70	—
Nitrate, crude dom. bgs., c.l., works ton.		47.00	—
bulk c.l. works ton		43.50	—
imp. 100-lb. bgs., c.l. Atl Gulf, Pac., whse ton.		49.50	—
bulk, c.l. same basis ton.		46.00	—
Nitrite, USP, bbls. c.l., works, frt. equald 100 lbs.		8.50	—
t.c.l., same basis 100 lbs.		10.50	—
Orthosilicate conc., dms., c.l., works 100 lbs.		6.70	—
t.c.l., works 100 lbs.		7.05	7.65
hydrated, flake bbls. c.l. works. 100 lbs.		5.65	—
t.c.l., works 100 lbs.		7.60	7.90
Oxalate, 88% bgs., works 100 lbs.		10.85	—
Para-aminobenzoate (see Sodium p-Aminobenzoate)			
Para-aminosalicylate (see Sodium p-Aminosalicylate).			
Pentachlorophenate, briquets, bgs., c.l., works, frt equald lb.		.26	—
t.c.l. same basis lb.		.27½	.34
pellets, bgs., c.l., same basis lb.		.26	—
t.c.l. same basis lb.		.27½	.34
powd., bgs., dms., c.l., same basis lb.		.25	—
t.c.l. same basis lb.		.26½	.33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c per lb over carlot prices			
Perborate, NF, tech., bgs., c.l., works. lb.		.19	—
t.c.l., works lb.		.21	—
Peroxide, dms., c.l., dlvd. E. of Miss lb.		.20	—
t.c.l. same basis lb.		.20½	.21
Phenolsulfonate, USP fX, gran., dms lb.		.48	.49
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs.		7.05	—
t.c.l., works 100 lbs.		8.05	8.65
duohydrate, bgs., c.l., frt. equald 100 lbs.		7.60	—
t.c.l., frt. equald 100 lbs.		8.10	—
USP dried powd bgs., dms., works lb.		.19	.20½
monobasic anhyd., bgs., c.l., frt. equald 100 lbs.		8.70	—
t.c.l. frt. equald 100 lbs.		9.10	9 70
tribasic, anhyd., bgs., c.l., frt. bgs., c.l., frt. equald 100 lbs.		8.65	—
t.c.l., frt. equald 100 lbs.		9.05	9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs.		4.40	—
t.c.l. frt. equald 100 lbs.		4.80	5.40
Sodium phosphate in dms., 60c. to 80c. higher than bgs.			
Prussiate, yellow (see Sodium ferrocyanide).			
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lb.		10.85	—
t.c.l., works 100 lbs.		11.60	11.85
Ferric, dms., c.l., t.l., works lb.		.36	—
t.c.l., works lb.		.37	.39
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs.		7.52½	—
t.c.l. frt. equald 100 lbs.		7.92½	8.52½
Salicylate, USP, dms lb.		.78	.80
Sesquicarbonate, bgs., c.l., works, 100 lbs.		2.35	—
t.c.l., dlvd. zone 1 100 lbs.		4.10	4.35
zone 2 100 lbs.		4.35	4.60
zone 3 100 lbs.		4.75	4.90
zone 4 100 lbs.		5.35	5.60

Sales zones are: (1) Atl. States E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso. Tex

Sesquisilicate, hydrated, bgs., c.l., works. 100 lbs.		5.00	—
t.c.l., works 100 lbs.		5.35	—
dms., c.l., works 100 lbs.		5.50	—
t.c.l., works 100 lbs.		5.85	—
Silicate, liq., 40° Be. 1:3.2, turbid, dm., c.l., works 100 lbs.		1.55	—
t.c.l., works 100 lbs.		1.90	2.40
tanks, works 100 lbs.		1.20	—
47° Be, turbid, 1:2.9, dms., c.l., works. 100 lbs.		2.25	—
t.c.l., works 100 lbs.		2.95	3.10
tanks, works 100 lbs.		1.90	—
52° Be, turbid, 1:2.4, dms., c.l., works. 100 lbs.		2.65	—
t.c.l., works 100 lbs.		3.00	3.50
tanks, works 100 lbs.		2.30	—
solid, 1:3.2, bgs., works ton.		67.50	—
Silicofluoride, bgs., c.l., works lb.		.075	—
t.c.l., works lb.		.079	—
Sodium silicofluoride in dms., 0.4c. per lb. higher.			

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Sodium stannate, dms., works, frt. alld. E	lb.	.633	.692
Sulfa drugs (see Sulfa name)			
Sulfanilate, bbls., works	lb.	.22	—
Sulfate, NF, VII, dried, powd., dms	lb.	.22½	—
tech., anhyd., bgs. c.l., dlvd. E	ton.	52.00	—
detergent, rayon grade, bgs., c.l., works	ton.	34.00	—
bulk, c.l., works	ton.	31.00	—
USP, cryst., fib dms	lb	.17½	.18
gran., fib dms	lb	17½	.18
Sulfhydrate, flake, 70-72%, dms., c.l., works	lb.	.06¾	—
t.c.l., works	lb.	.07¾	—
liq. 40-44% tanks works, 100% basis	ton.	120.00	—
Sulfide, flake dms., c.l. works, E., frt. equald	lb.	.05½	—
t.c.l., same basis	lb.	.06½	—
fused bbls c.l. works E., frt. equald	lb.	.05	—
t.c.l., same basis	lb.	.06	—
Sulfite, anhyd., bgs. c.l. 100 lbs.		3.50	—
t.l., same basis 100 lbs.		4.00	—
Sulfocyanide CP (see Sodium thiocyanate)			
Tetraborate (see Borax)			
Tetrasulfide liq. 40%, dms., c.l., c.l., works	lb.	.04	—
t.c.l., works	lb.	.05	—
Thiocyanate, CP, dms	lb.	.55	.65
tech. anhyd. dms. 1 ton lots or more, works	lb.	.317	—
less than ton lots works	lb.	.337	—
Thiosulfate NF, cryst., bbls	lb.	.13½	—
tech (see Sodium hyposulphite).			
Titanate, ctns., c.l., works	lb.	.14¼	—
5-ton lots, works	lb.	.14½	—
1-ton or less, works	lb.	.14¾	—
Toluene sulfonate dms., c.l. or t.l	lb.	.38	—
t.c.l.	lb.	.42	—
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E	lb.	.37½	—
t.c.l. frt adjusted E	lb.	.39½	—
50-lb. dms., c.l., frt. alld. E	lb.	.38	—
t.c.l. frt adjusted E	lb.	.40	—
10-lb. cns., c.l., frt alld E	lb.	.44	—
t.c.l. frt adjusted E	lb	.46	—
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c per pound higher			
Tripolyphosphate, bgs. c.l. works, frt. equald 100 lbs.		7.87½	—
t.c.l. same basis 100 lbs.		8.27½	8.87½
Trisilicate, powd. 1:3.2, bgs., c.l., works 100 lbs.		8.65	—
t.c.l. works 100 lbs.		9.40	9.80
dms., c.l. works 100 lbs.		9.05	—
t.c.l. works 100 lbs.		9.80	10.40
Tungstate tech. kgs. dlvd. E	lb	2.15	—
Sodium-ammonium phosphate, purif., cryst., dms., works	lb.	.52	—
Sodium-carboxymethyl cellulose (see CMC)			
Sodium-cinchophen (see Cinchophen-sodium).			
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd	lb.	.21	—
t.c.l. same basis	lb.	.21½	—
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works	lb.	.28	—
smaller lots same basis	lb.	.30	—
Solvent naphtha, coaltar, high flash, tanks, frt. equald	gal.	.31	.35
petroleum (see Petroleum solvent, partial aromatic)			
Sorbitan monostearate, fib dms., 20,000-lb. lots, works	lb.	.32	—
10,000 to 20,000-lb lots, works	lb.	.34	—
smaller lots, works	lb.	.37	.39
Tristearate, fib dms., 20,000-lb. lots, works	lb.	.33	—
10,000 to 20,000-lb lots, works	lb.	.35	—
smaller lots, works	lb.	.38	.40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works	lb.	.23	—
1 to 5-ton lots, works	lb.	.25	.26
powd., dms., 1 to 5-ton lots, works	lb.	.38	—
soln., coml., aqueous, dms., c.l., works	lb.	.24¼	—
ton lots, works	lb.	.25	—
smaller lots, works	lb.	.25¼	—
tanks, works	lb.	.23¼	—
reg. 70% aqueous, dms., c.l., works	lb.	.16	—
ton lots, works	lb.	.16¾	—
smaller lots, works	lb.	.17	—
tanks, works	lb.	.15	—
Soybean meal, 44% bulk, Decatur.	ton.	47.00	—
protein, chemically isolated, bgs., c.l., works	lb.	.23	—
mechanically refd., bgs., t.c.l., works	lb.	.066	—
Sparteine sulfate, cns	oz.	.80	.90
Spearmint leaves, dom., bls	lb.	75	—
Spruce extract, liq., reg. tanks, works	lb.	.01¾	—
powd., super, bgs., c.l., works	lb.	.05¼	—
t.c.l., works	lb.	.05½	—
Squill, white, bls	lb.	.16	.18
powd. bbls., bxs	lb.	.17	.20
St. John's bread edible, bls	lb.	.13	.15
Stannic chloride, anhy., dms., works	lb.	.79	.80
Oxide, dms., dlvd. E	lb.	1.04	1.05
Stannous chloride, anhyd., dms., works	lb.	.915	1.409
hydrous, cryst., dms., works,	lb.	.80	.81
Sulfate, dms., works	lb.	1.05	1.07
Starch corn pearl, paper bgs., c.l.,	100 lbs.	7.32	—
t.c.l.	100 lbs.	7.47	—
powd., paper bgs., c.l.	100 lbs.	7.44	—
t.c.l.	100 lbs.	7.59	—
Prices for corn starch in cotton bags, 15c per 100 lbs higher			
Potato, dom. Idaho bgs., c.l., works	lb.	.06	—
Maine, bgs., c.l., works	lb.	.06¼	—
ex whse, N. Y.	lb.	.08¼	.09¼
Rice, bgs., t.c.l.	lb.	.15½	.16
Wheat, bgs	lb.	.08½	.09
Star root (see Helonias root).			
Stargrass Root (see Aletris root).			
Stavesacre seed, bgs	lb.	.60	.61
Stearine oleo (see Oleostearine).			
Stramonium leaves, bgs	lb	.18	.20
Streptomycin hydrochloride, bulk,	gram.	.0850	.0875
Sulfate, bulk	gram.	.0850	.0875
Strontium bromide, NF, dms., 150-lb. fib. dms	lb.	.84	—
Carbonate, pure, dms., 5-ton lots or more, works	lb.	.35	—
1-ton lots, works	lb.	.37	—
tech., dms., works	lb.	.19	—
Chromate, bbls., works	lb.	.46	—
Iodide, pars. 25-lb. lots	lb	3.42	—
Nitrate, bbls., c.l., works 100 lbs.		11.00	—
t.c.l., works 100 lbs.		12.00	—
Salicylate, NF, dms	lb.	1.88	—
Sulfate, air floated, 90%, 325 mesh, bgs., works	ton.	56.70	66.15
Strophanthin, K., bots.	oz.	25.00	25.50
G. (see Ouabain, USP).			
Strophanthus seed, Kombi, biologically tested, bgs	lb.	3.50	3.75
Styrax, USP, cs	lb.	.78	.80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld.	lb.	.22¼	—
t.c.l. same basis	lb.	.23½	—
tanks, same basis	lb.	.20½	—
synthetic rubber grade, 99%, dms., c.l., frt. alld.	lb.	.18½	—
t.c.l., same basis	lb.	.19½	—
tanks, same basis	lb.	.16	—
Styrolyl acetate, bots	lb.	1.45	1.70
Sucrose, refd., white, bgs., refy., E	lb.	.0885	—
Octa-acetate, denaturing grade, 100-200-lbs., bgs., t.c.l., works	lb.	.76	—
Sugar (see Sucrose).			
Sulfabenzamide, dms	lb	4.00	4.50
Sodium, dms	lb	4.10	4.60
Sulfacetamide, fib. dms	lb	4.00	4.20
USP, same basis	lb.	5.00	5.20
Sodium fib dms	lb	5.00	5.20
USP, same basis	lb.	5.20	5.40
Sulfadiazine USP microcrystals, dms	lb.	10.60	11.10
powd., dms	lb	10.25	10.75
Sulfadiazine-sodium USP dms	lb.	11.25	11.75
microcrystals, dms	lb	11.60	12.10
Sulfaguanidine USP dms	lb	2.50	—
Sulfamerazine USP microcrystals	lb.	10.65	11.15
Sulfamerazine-sodium USP dms.,	lb.	11.25	11.75
Sulfamethazine microcrystals, dms.,	lb	8.90	9.40
powd., dms	lb	8.50	9.00
Sulfanilamide, USP 30-80 mesh, dms	lb.	1.40	1.60
microcrystals, dms	lb	1.70	1.90
powd., dms	lb	1.30	1.50
Quinoxaline, veterinary, dms	lb	6.40	6.75
Sulfapyridine NF powd. bots. tins.	lb	7.00	7.50
Sulfapyridine-sodium, monohydrate, dms	lb.	7.50	8.00
Sulfathiazole, NF, microcrystals, dms	lb	2.85	3.00
powd dms	lb	2.50	2.65
Sulfathiazole-sodium, NF, dms	lb.	2.75	2.90
Sulfur coml., flour, bgs., mines,	100 lbs.	2.55	—
bbls., mines	100 lbs.	3.30	—
lump, bgs., mines	100 lbs	2.45	—
bbls. mines	100 lbs	2.90	—
crude, bulk, f.o.b. cars, mines,	long-ton.	26.50	—
export f.o.b. vessels Gulf ports,	long-ton.	28.00	—
domestic and Canada, f.o.b. vessel Gulf port	long-ton.	28.00	—
Mexican, dark or blended, f.o.b. vessel, Coatzacoalcos,	long-ton.	25.00	—
refd., flowers, NF, bgs., mines,	100 lbs.	4.75	—
bbls., mines	100 lbs.	6.10	—
flour, light, bgs., mines	100 lbs.	4.25	—
bbls., mines	100 lbs.	5.35	—
lump, bgs., mines	100 lbs.	4.05	—
rolls, bgs., mines	100 lbs.	4.60	—
bbls., mines	100 lbs.	5.35	—
salt block, bbls., mines	100 lbs.	4.25	—
virgin block, bbls., mines	100 lbs.	4.20	—
rubbermakers, coml., reg. bgs., mines	100 lbs.	2.65	—
bbls., mines	100 lbs.	3.80	—
98-100% passing through 325 mesh, bgs., mines	100 lbs.	2.75	—
bbls., mines	100 lbs.	3.90	—
refd., bgs., mines	100 lbs.	4.00	—
bbls, mines	100 lbs.	5.15	—
Sulfur, rubbermakers, treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.95	—
bbls mines	100 lbs.	4.10	—
Sulfur dichloride, dms., c.l., works, frt. equald	lb.	.04	—
t.c.l. same basis	lb	04¾	—
tanks same basis	lb	03¾	—
Dioxide, liq., coml., cyls., works, frt. equald	lb.	.10	.12
multi unit cars, works	lb	0535	—
tanks, works	lb	045	—
refrigeration 150-lb. cyls. dlvd	lb	30	—
Monochloride 55-gal. dms., c.l., frt. equald	lb.	.04	—
t.c.l. same basis	lb	04¾	—
tanks, same basis	lb	03¾	—
Sumac leaves, 28% tannin, bgs., ex-dock	ton.	130.00	—
ground, bgs., ex-dock	ton.	130.00	—
Superphosphate, run-of-pile under 22% a.p.a. pulv., bulk, c.l., Baltimore, unit-ton		88	.91
Carteret, N. J. unit-ton		88	.91
triple 48% or more a.p.a. pulv., bulk c.l. East Tampa, Fla. unit-ton		98	—

T

2,4,5-T dms. c.l. works, frt. equald	lb	1.18	—
t.c.l. same basis	lb	1.25	—
Isopropyl ester dms., c.l., works, frt. equald	lb	1.24	—
t.c.l. works	lb	1.29	—

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. . . it's TITANOX* white pigments. For stucco, masonry, wood, metal or any building surface, white or tinted coatings that must look good and last are best brightened and opacified by these leading white pigments.

From the full TITANOX line you can solve any formulation problem: you can select the best combination of anatase and rutile pigments for "clean-up" in whites, or the rutile pigment for proper resistance to fading-chalking of tints. Titanium Pigment Corporation, 111 Broadway, New York 6, N. Y.; Atlanta 5; Boston 6; Chicago 3; Cleveland 15; Houston 2; Los Angeles 22; Philadelphia 3; Pittsburgh 12; Portland 14, Ore.; San Francisco 7. In Canada: Canadian Titanium Pigments Limited, Montreal 2; Toronto 1; Vancouver 2.

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Talc—Zinc Borate

Talc, dom., ord., Calif., grd., bgs., c.l., works ton 33.00 - 39.50
Vermont off color grd., bgs., c.l., works ton 19.40 - —
t.c.l., works ton 37.00 - —
fibrous, New York, grd., bgs., c.l., works ton 28.00 - —
t.c.l., works ton 31.00 - 36.00
99.5% 325 mesh bgs. c.l. works ton 31.00 - —
t.c.l., works ton 34.00 - —
99.95% micronized, bgs., works ton 38.00 - —
tmp Canadian grd. bgs., c.l., mines ton 30.00 - 45.00

Tallow, edible, tanks, dlvd lb. .13 - .13½
inedible, fancy, bleachable, tanks, dlvd lb. .07¾- —
guaranteed, dms., f.a.s. lb. .09¼- —
No. 1, tanks, dlvd. lb. .06⅞- —
prime, tanks, dlvd lb. .07½- —
special tanks, dlvd lb. .07⅛- —
sulfonated, 25%, bbls., l.c.l lb. .08⅜- .08⅞
50%, bbls., l.c.l lb. .09⅜- .10⅛

Tankage, animal, feeding, 9-11% ammonia bulk unit-ton 5.00 - —
Chicago, bulk unit-ton 6.00 - —

Tapioca flour Brazilian bgs. ex whse. lb. .12 - .13½

Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
t.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28%, dms., c.l., same basis, gal. .54 - .56
t.c.l. same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53% dms., c.l. same basis, gal. .70 - .72½
t.c.l. same basis gal. 73½ - 74½
tanks, same basis gal. .62½ - —
Coal (see Coaltar).

Tartar, emetic (see Antimony-potassium tartarate)

Terpine glycol ether, dms., c.l., works lb. .23½- —
t.c.l. works lb. .25½- —
tanks works lb. .22 - —
Hydrate, NF, cryst., powd., 100-lb fib dms lb. .70 - —

Terpineol, dms., t.c.l., dlvd E lb. .23¾- —
extra dms lb. .41 - .60
prime, dms lb. .30 - .45

Terpinyl acetate extra cns. dms. lb. .60 - .75
prime, dms lb. .55 - .70
Propionate dms lb. 1.75 - 2.00

Terra alba (see Gypsum)

Testosterone USP 100-gm. lots, bots gram .70 - —
Propionate USP 100-gm lots, bots gram .68 - —

Tetrachloroethane dms. works lb. .14½- —

Tetrasodium pyrophosphate (see Sodium pyrophosphate)

Tetrachloroethylene, tech. (see Perchloroethylene).
USP, 55 gal. dms., works lb. .20½- .21½
smaller dms., works lb. .23½- .25

Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½- —
t.c.l., dlvd E lb. .62½- —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —

Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
t.c.l., dlvd E lb. .50 - —
tanks, dlvd E lb. .47 - —

Tetrahydrofuran, dms., c.l., or t.l., works lb. .36½- —
t.c.l. or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —

Tetrapotassium phosphate (see Potassium phosphate).

Thallium metal dlvd lb. 12.50 - 15.00
Sulfate 99% bots dlvd lb 8.00 - 13.00

Theobromine, NF, fib. dms lb. 4.50 - —
And sodium acetate USP fib
Sodio-Salyicylate, NF, fib. dms lb. 3.90 - —

Theophylline, anhyd. or USP., 100-lb. dms lb. 3.65 - —

Thiamine hydrochloride, USP, regular fib dms kilo. 60.00 - —
ampule grade fib dms kilo. 62.00 - —
Mononitrate USP fib dms kilo. 62.00 - —

Thiocarbanilide dms. ton lots lb. 72 - —
less ton lots lb. 74 - —

Thiodiphenylamine (see Phenothiazine)

Thiourea, tech., bgs. t.l., frt. alld. lb. .33 - —
t.c.l., frt. alld lb. .35 - —

Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb. 3.50 - —

dl-Threonine bots. 1-kilo lots. kilo. 450.00 - 500.00

Thymol, fib. dms lb 2.50 - 2.75
Iodide NF dms lb 7.50 - —

Timbo root (see Cube root).

Tin chloride (see Stannous chloride, anhydrous),
crystals (see Stannous chloride, hydrous),
Oxide (see Stannic oxide),
Metal (Straits) lb. .99⅝- —
Sulfate (see Stannous sulfate).
Tetrachloride, anhyd. (see Stannic chloride, anhydrous).

Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd lb. .25½- —
t.c.l., dlvd lb. .26½- —
ceramic, bgs., c.l., dlvd lb. .23½- —
t.c.l., dlvd lb. .24½- —
reg., bgs., c.l., dlvd lb. .23½- —
t.c.l., dlvd lb. .24½- —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla ton. 120.00 - —
Niagara Falls, N. Y., c.l., ton. 137.50 - —
5-ton lots ton. 142.50 - —
ton lots ton. 147.50 - —
rutile, nonchalking, bgs., c.l., dlvd. E lb. .27½- —
t.c.l., dlvd. E lb. .28½- —
Milled metallurgical titanium dioxide $7.50 per ton higher.

Hydride, cns. works lb. 7.95 - 9.00

Pigment, calcium-rutile base, reg., bgs., c.l., dlvd lb. .09¼- —
t.c.l., works lb. .09¾- —
high-tinting, dms., c.l. lb. .09 - —
t.c.l. lb. .09½- —

Tetrachloride tech., dms., c.l., works lb. .26 - —
t.c.l., works lb. .27½- .29
tanks, works lb. .20 - —

dl-a-Tocopherol, bots kilo. 134.20 - —
Acetate, bots kilo. 122.00 - —
25% dry, powd., bots kilo. 30.50 - 32.00
Acid succinate kilo. 165.00 - —

o-Tolidine base, paste kgs., 100% basis lb. 1.35 - —
dry, kgs., 100% basis lb. 1.40 - —
Hydrochloride paste, kgs., 100% basis lb. 1.35 - —

Tolu balsam, cns lb. 4.50 - 5.25

Toluene (see Toluol)

p-Toluenesulfonamide, powd., dms., works lb. 70 - —

m-Toluidine, dms. c.l. works, frt. alld lb. .79 - —
t.c.l. same basis lb. .80 - —
tanks, same basis lb. .78 - —

o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
t.c.l. same basis lb. .24 - —
tanks, same basis lb. .22 - —

p-Toluidine flake dms. frt alld lb. .64 - —
solid dms. frt alld lb. .60 - .61

Toluol, coaltar, indust or nitration, tanks, works:—
Bethlehem Pa gal. .32 - —
Birmingham dist gal. .32 - —
Chicago dist gal. .32 - —
Cleveland dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N Y gal. .32 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .32 - —
Middletown, Ohio gal. .33½- —
Minnequa, Colo gal. .32 - —
Philadelphia dist gal. .32 - —
Pittsburgh dist gal. .32 - —
Sparrows Point, Md gal. .32 - —
Terre Haute, Ind gal. .34 - —
Youngstown Ohio gal. .32 - —

Petroleum, indust., 2°, tanks, works:—Albany N Y gal. .35 - —
Bayonne, N. J gal. .34 - .35½
Baytown, Tex gal. .33 - .35½
Chicago, Ill gal. .35 - .35½
Denver, wtch gal. .35 - —
Houston, Tex gal. .33 - —
Philadelphia, Pa gal. .34 - —
Providence, R. I gal. .35 - .35½
Wood River, Ill gal. .34 - —

2,4-Tolylenediamine cryst., fib. dms., c.l. frt alld lb. .97 - —
t.c.l. frt alld lb 1.00 - —
powd., fib. dms., same basis lb. 1.00 - —

Tonka beans, Angostura cks. lb. No prices.
Brazilian, Surinam, cs lb. 1.35 - —

Totaquine 100-oz lots, cns oz. .42 - —

Toxaphene dms. c.l. t.l. works lb. .22 - —
t.c.l., l.t.l., works lb. .28 - —

Triacetin dms. c.l., dlvd. E of Rockies lb. .39 - —
t.c.l. same basis lb. .40 - —
tanks, same basis lb. .37 - —

Tributyl citrate, tech., non-ref. dms. c.l. frt alld E of Denver lb. .42½- —
t.c.l. frt alld E of Denver, lb. .43½- —
tanks frt alld E of Denver, lb. .40 - —

Phosphate, dms. c.l., works lb. .52½- —
t.c.l., same basis lb. .53½- —
tanks same basis lb. .50 - —

Tributylamine dms., c.l., works lb. .67½- —
t.c.l., same basis lb. .68½- —
tanks, same basis lb. .65 - —

Trichlorobenzene dms. c.l., frt. alld E lb. .14½- —
t.c.l. frt alld E lb. .15½- —
tanks frt alld E lb. .13 - —
Trichlorobenzene prices in the West 1¾c. higher.

Trichloroethylene dms. c.l., or t.l., works, frt equald lb. .12½- —
t.c.l. dlvd E lb. .14½- —
tanks, works, frt. equald lb. .11¼- —

1,1,1-Trichloroethane, dms., c.l., works lb. .13½- —
t.c.l., works lb. .14¼- .16¼
tanks, works lb. .11½- .12½

Tricholine citrate 85% soln., ref. chys works frt adjusted lb 1.40 - 1.45

Tricresyl phosphate coaltar, dms., c.l., dlvd lb. .35 - —
t.c.l. dlvd lb. .36 - —
tanks, dlvd lb. .32½- —
petroleum, dms., c.l., dlvd lb. .34½- —
t.c.l. dlvd lb. .35½- —
tanks, dlvd lb. .32½- —

Triethanolamine dms. c.l., dlvd. E lb. .24½- —
t.c.l. same basis lb. .25½- —
tanks same basis lb. .22 - —

Triethylamine dms. c.l., works, dlvd E lb. .49 - —
tanks, same basis lb. .46½- —

Triethyl citrate, refd, tech., non-ref dms c.l. frt. alld E, of Denver lb. .45¾- —
t.c.l., frt. alld. E. of Denver, lb. .46¾- —
tanks frt alld E of Denver, lb. .43¾- —

Phosphate, dms., c.l., dlvd lb. .40½- —
t.c.l. dlvd lb. .41½- —
tanks, dlvd lb. .38 - —

Triethylene glycol dms. c.l. dlvd. E lb. .21 - —
t.c.l., dlvd., E lb. .22 - —

Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
t.c.l., dlvd E lb. .52½- —
tanks, dlvd E lb. .49 - —

Tri-isopropanolamine, dms. c.l., dlvd E lb. .23¼- —
t.c.l. dlvd E lb. .24¼- —
tanks, dlvd E lb. .20¾- —

Trimethylamine 25-40% soln. dms., c.l., works frt equald, 100% basis lb. .42 - —
t.c.l. works frt equald, 100% basis lb. .42½- —
tanks works frt equald, 100% basis lb. .33 - —

Trioxane, pure, dms., c.l., t.l., works lb. .50 - —
t.c.l., works lb. .51½- —

Tripentaerythritol bgs. t.c.l. works, lb. .35 - —

Triphenyl phosphate bbls. c.l. frt. equald lb. .40 - —
t.c.l., frt equald lb. .41 - —

Triphenylguanidine bbls., works lb. .90 - —
tanks, same basis lb. .18½- —

Tripropylene glycol dms., c.l., frt. alld E lb. .20½- —
t.c.l. frt alld E lb. .21½ —
Tripopylene glycol prices 1c. per lb. higher in West.

Phosphate (see Sodium phosphate tribasic)

Tyrothricin, USP, bots grams. .55 - .58

dl-Tryptophane, fib ctns., works. kilo. 165.00 - —

Tungsten metal powd. 2-5 microns, dms., works lb. 4.20 - —

Turpentine gum (see Protective Coatings market, Naval Stores).

U

Unicorn root, false (see Helonias root).
True (see Aletris root)

Urea, 46% N. indust., bgs., c.l., t.l., dlvd E ton 120.00 - —
t.c.l. dlvd E, ex whse ton 140.00 - —
45% N agricultural, bgs., c.l., (30 tons), dlvd. E ton 105.00 - —

Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W Va ton. 126.00 - —
C grade, tankcars, same basis ton. 124.50 - —
37 grade, tankcars, same basis, ton. 153.00 - —

Urethane, USP dms lb. 1.45 - —

Uva-ursi leaves, bls lb. 13 - .14

V

Valerian root, Belgian, bgs. lb. .35 - —
Indian, bgs. lb .27 - —
dl-Valine, dms., works lb. 21.00 - 27.50

Valonia beards, 40-42% tannin, bgs., ex dock ton. 86.00 - —
cups, 28-30% tannin bgs., ex dock ton. 64.00 - —
extract, powd., 63% tannin, bgs., exdock, duty extra lb. .09¾- —

Vanadium pentoxide tech., dms., works lb 1.28 - 1.33

Vanilla beans, Bourbon, tins lb. 8.75 - 9.00
Mexican, cuts, tins lb. 7.50 - 7.75
whole, tins lb. 8.25 - 8.50
Tahiti cs lb 7.00 - —

Vanillin ex eugenol tins 25-lb lots lb 6.50 - 6.75
smaller lots lb 6.90 - 7.25
ex lignin, dms., 100-lb. lots lb. 3.10 - 3.20
smaller lots lb. 3.40 - —

Vinyl acetate monomer, 55-gal. dms. c.l., works lb. .19 - —
t.c.l., works lb. .20 - —
tankcars, works lb. .16½- —
tanktrucks less than 4,000 gal., works lb. .17½- —

n-Butyl ether, tech., dms., t.c.l., works lb. .35 - —

Chloride monomer tanks works lb .11 - .12

Ether, USP, anesthesia, bots., 50 c.c., hospitals bot. 1.12 - —
75 c.c. bot. 1.56 - —
tech., dms., c.l., works lb. .26 - —
t.c.l. works lb. .28 - —
tanks works lb. .25 - —

Ethyl ether, tech., dms., works. lb. .30 - —

Isobutyl ether, tech., dms., t.c.l., works lb. .35 - —

Methyl ether, cyls., works lb. .30 - —

Cylinders are sold outright, or if shipped against deposit, a free perio. of 60 days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made

Propionate monomer dms., c.l., dlvd lb. .49 - —
t.c.l. same basis lb. .50 - —
tanks, same basis lb. .47 - —

Trichloride (see Trichloroethane)

2-Vinylpyridine 10 dms to tanks, works lb 1.36 - —
1 to 9 dms., works lb 1.50 - —
tanks, works lb 1.33 - —

Vinyltoluene, dms., c.l., frt. alld lb. .18½- —
t.c.l., frt. alld. lb. .19½- —
tanks, frt. alld. lb. .16 - —

Viostero, in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- .04¾

Vitamin A acetate, syn., crystalline, beads 500,000 A units per gram gram. .07¼- —
dry 500,000 units per gram, kilo lots kilo. 67.50 - —
325,000 units per gram, same basis kilo. 43.88 - —
250,000 units per gram, same basis kilo. 33.75 - —

Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies

liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
palmitate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units. .10 - —
in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —

B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin)
and Yeast)
B_{12}, crystalline, 1-gram or 5-gram vials gram. 245.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram. 165.00 - —

C (see Acid, ascorbic)

D (see Oils, codliver and fish-liver Calciferol, and Viosterol)
D_2, dry 850,000 units per gram, kilo lots kilo. 42.50 - —
less than kilo lots kilo. 45.00 - —

E (see a-Tocopherol and Oil, wheat germ).

G (see Riboflavin)
H (see Biotin)
K Active (see Menadione)
K, 25 gram bots gram. 4.50 - —

Violet methyl toner (see Blue methylviolet toner)

V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls. lb 2.25 - —
dlvd lb 1.95 - —
25-49-lb lots, N. Y or Chicago lb 2.05 - —
5-24-lb. lots, cns., N. Y or Chicago lb 2.15 - —

Wattle bark, fair average, African, bls., ex dock ton. 88.00 - —
merchantable, bls., ex dock ton. 82.00 - —
extract, liq., 35% tannin, bbls lb. .08¼- .08½
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .08275- —
S. Africa, 60% tannin, bgs., ex dock, duty extra lb. .0840- —

Warfarin 0.5% dms. 50-lb lots, dlvd lb. 1.95 - —
25-49 lb. lots, N. Y. or Chicago lb. 2.05 - —
5-24 lb. lots, cns., N. Y. or Chicago lb. 2.15 - —

Wax, amorph. (see Wax microcrystalline)
Bayberry, bgs lb. .45 - .47
Bees, crude, African, bgs lb. .67 Nom.
Brazilian, bgs lb. .69 Nom.
Central American, bgs lb. .68 Nom.
Chilean, bgs lb. .69 Nom.
refd., USP, bleached, white bricks, 100-lb. ctns lb. .78 - .81
slabs, 100-lb. ctns lb. .77 - .80
yellow, bricks, 100-lbs. ctns. lb. .69 - .71
slabs, 100-lbs. ctns lb. .68 - .70
Candelilla, crude, bgs lb. .67 - .69
refd., bgs lb. .74 - .75

Powdered candelilla: 20 to 100 mesh, 7c higher.

Carnauba, chalky, bgs., ton lots, lots lb. .65 Nom.
North country No. 2, crude, bgs., ton lots lb. .73 Nom.
No. 3, Ceara, crude, bgs., ton lots lb. .64 - .66
refd., pure, bgs., ton lots lb. .75 - .76
tech., bgs., ton lots lb. .66 - .67
Parnahyba, crude, bgs., ton lots lb. .66 - .67
refd., pure, bgs., ton lots lb. .75 - .76
yellow, No. 1, Ceara, bgs., ton lots lb. 1.33 - 1.34
Parnahyba, bgs., ton lots lb. 1.35 - 1.36

Powdered carnauba was price differential same as powdered candelilla.

Wax, Japan, cs lb. .43 - .44
Microcrystalline, coating grades, tankcars, works lb. .10 - .11
laminating grades tankcars, works lb. .11 - .12
Montan, dom., refd., bgs. lb. .29 - .30
imp., crude, Bohemian, bgs lb. .26 - .28
German, bgs lb. .35 Nom.
Ouricury, refd., pure, bgs. lb. .85 - .86
tech., bgs lb. .80 - .82
Paraffin (see P).
Spermaceti, blocks, cs lb. .30 - .33
cakes cs lb. .31 - .34
Sugar cane, dom., refd., slabs, 80 lbs ctns., works lb. .65 - .75
spot lb. 67¼- .72¼

White lead (see Lead White).

White pine bark, rossed bls lb. .18 - .19

White precipitate, USP powd. dms., lb. 6.55 - —

Whiting (see Calcium carbonate)

Wild cherry bark, thin, nat., bls lb. .20 - —
rossed, bls lb. .21 - —

Witch hazel, bark, bls lb. .16 - .17
leaves, bls lb. .27 - —

Wollastonite fine, bgs., c.l., works ton. 39.50 - —
t.c.l., ex whse ton 56.00 - —
medium, bgs., c.l., works ton 27.00 - —
t.c.l., ex whse ton. 44.00 - —

Woolfat, crude (see Degras), USP (see Lanolin)

Wormseed, American bgs. lb. .20 - .25
Levant, bgs lb. 4.25 - 4.50
45°-47°C., dms., c.l. same basis,

X

Xylene (see Xylol)

Xylenol, cryst. 58°-60°C., m.p., dms., t.c.l., works lb. .40 - —
56°-58°C. dms. t.c.l., works, frt equald lb. .30 - —
45-47°C., same basis lb. .212 - —
t.c.l. same basis lb. .215 - —
tanks, same basis lb. .199 - —
fraction, b.r., 7°-9°C., dry above 227°C. dms., c.l., same basis gal. .96 - —
t.c.l. same basis gal. .99 - —
tanks, same basis gal. .85 - —
dry at or below 227°C., dms., c.l., same basis gal. 1.11 - —
t.c.l. same basis gal. 1.14 - —
tanks, same basis gal. 1.00 - —

Xylidines, mixed, o-m-p, dms., c.l. or t.l., works lb. .39 - —
t.c.l. same basis lb. .40 - —
tanks, same basis lb. .38 - —

Xylol, coaltar, indust., tanks, works:—
Bethlehem Pa gal. .34 - —
Birmingham dist gal. .32 - —
Chicago dist gal. .35 - —
Cleveland dist gal. .34½- —
Geneva, Utah gal. .29 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N Y. gal. .35 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .33 - —
Middletown, Ohio gal. .34 - —
Minnequa, Colo gal. .34 - —
Philadelphia dist gal. .34 - —
Pittsburgh dist gal. .32 - —
Sparrows Point, Md gal. .34 - —
Terre Haute, Ind. gal. .34 - —
Youngstown Ohio gal. .32½- —

Petroleum, indust., tanks, works:—
Bayonne, N. J gal. .34 - .35½
Baytown, Tex gal. .33 - .35½
Chicago, Ill gal. .35 - .35½
Houston, Tex gal. .33 - —
Philadelphia, Pa. gal. .34 - —
Providence, R. I. gal. .35 - .35½
Wood River, Ill. gal. .35 - —

Y

Yara, yara, cns lb. 2.15 - 2.65

Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms lb. .47 - —
90 int'l B units per gram, 100-lb. dms lb. .52 - —
200 int'l B units per gram, 100-lb. dms lb. .56 - —
300 int'l B units per gram, 100-lb dms lb. .60 - —
debittered, USP Saccharomyces, dlvd lb. .27 - —
Torula, USP dlvd lb. .18 - —

Yellow, barium chromate, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —

Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below

Benzidine, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd lb. 2.45 - —
Lightfast, bbls., dlvd lb. 3.25 - —
Cadmium, CP, all shades, bbls., frt. alld E. of Rockies lb. 2.85 - —
Selenide lithopone, all shades, bbls., frt. alld E. of Rockies lb. 1.15 - —

Cadmium yellows, Los Angeles and San Francisco, ex whse. 1c per lb. higher.

Chrome, CP, bbls. dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .35 - —

Dlvd. Ala., Fla., Ga. La. (Shreveport 1½ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso Tex. 2c higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha St Joseph 1.6c. higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Hansa, 10 g., bbls., same basis as yellow, crome. lb. 2.35 - —
G pigment, bbls lb. 2.20 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .06 - —
Peruvian type bgs. t.c.l lb. .0205- .0345
pure, bgs., c.l., works lb. .11½- —
t.c.l. works lb .11¾- —
Mercury, oxide, bbls., 1,000-lb. lots. lb. 5.58 - —
smaller lots lb 5.60 - —
Ocher (see Yellow, iron oxide, natural)
Zinc (chromate), bbls., dlvd lb. .29 - —
basic, bbls., dlvd lb. .34 - —
Yerba santa leaves, bls lb. .40 - .42
Yohimbine hydrochloride, bots, tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more lb. .38 - —
1,000 to 36,000 lb. lots, works lb. .40 - —
smaller lots, works lb. .43 - —
Zinc acetate NF VIII dms lb. .53 - —
tech., dms., works lb. .29½- .29¾
Borate, bgs., c.l., dlvd. E lb. .192 - —
t.c.l., dlvd. E lb .209 - —

—Continued on page 39

What's BEHIND THE MOST COMPLETE VITAMIN LINE IN THE FIELD?

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Sterwin's vitamin research is done at the Sterling-Winthrop Research Institute (above) where scientists work constantly to improve existing products and create new products and formulations.

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All Sterwin products are subject to rigid control testing procedures. The Sterwin label is your constant guarantee of quality, purity and dependability.

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VITAMIN A POWDER
(AVAILABLE ALSO WITH VITAMIN D_2 ADDED)

•

THIAMINE HYDROCHLORIDE
(REGULAR AND AMPULE GRADES)
THIAMINE MONONITRATE

•

RIBOFLAVIN

•

PYRIDOXINE HYDROCHLORIDE

•

***VITAMIN B_{12} CRYSTALLINE**
VITAMIN B_{12} CRYSTALLINE 0.1% TRITURATION
VITAMIN B_{12} ORAL GRADE
VITAMIN B_{12} SOLUBLE GRADE

•

ASCORBIC ACID
(AVAILABLE IN SIX GRANULATIONS, ALSO IN COATED AND AMPULE FORMS)

•

D CALCIUM PANTOTHENATE
DL CALCIUM PANTOTHENATE

•

ALPHA TOCOPHEROL
ALPHA TOCOPHEROL ACETATE

•

NIACIN
NIACINAMIDE

•

VITAMIN D_2 CRYSTALLINE
(CALCIFEROL)
VITAMIN D_3 CRYSTALLINE
(BOTH AVAILABLE IN OIL SOLUTIONS)

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Preventing Poison Accidents

Accidental poisonings are getting more and more attention from individuals and groups that are seriously concerning themselves with the growing need for safety measures in all areas of living. Even though the rate of fatal poisonings is reported to have been cut in half over the past ten years, data recently attributed to the American Medical Association show that three persons die each day from accidental poisoning and more than four hundred are made ill by the same cause. The data show that one-third of the victims are children and that their poisonings are almost wholly the result of their eating or drinking a medicine, cosmetic, or household-care product.

Obviously, such mishaps are beyond the scope of many, if not most, national safety programs, such as that of the Manufacturing Chemists Association. The American Medical Association has recently launched a new campaign of education and warning designed to alert the public, especially parents, still more effectively on the need for care in the use and keeping of potentially harmful materials. Other participants in the campaign, in addition to the National Safety Council, are national organizations in advertising and retailing fields. One of its primary objectives is to get parents to keep all medicines out of the reach of children at all times. Many of the cases of children's poisonings by medicines are attributable to failure on the part of an adult member of the family to return a container to the medicine shelf after taking a dose of its content. Almost as many are attributable to the accessibility of a medicine in an easily opened cabinet within the reach of a curious child with a chair.

Many medicinal products are labeled with a warning, at least a general one that all medicines be kept out of the reach of children. Caution labeling is said to be used by two-thirds of the manufacturers of packaged medicines. Others are adopting the practice. Some are using containers which cannot be opened by a child. There is a strong feeling among those seriously concerned with the problem that containers can be broken and that the popular type of caution labeling is not very effective in the direction of parental care, because labels are not read unless they are constructed much more strikingly than is the custom in such practices. The critics put still more stress upon the necessity for really effective labeling of cosmetics, pesticides, cleaners, and other non-medicinal products not usually kept in a special cabinet or other space.

The belief that something drastic must be done has come to a head in a movement in the retail drug trade which has resulted thus far in the launching by the New Jersey Pharmaceutical Association of a statewide sticker campaign to prevent the accidental poisoning of children. In this movement, a red sticker with the warning, "Keep out of the reach of children," will be attached to "all potentially harmful drugs, medicines, cosmetics, and household preparations that are commonly sold without prescription." The association has asked for "sensible consumer cooperation" in its campaign to assure a safety in the handling and storage of products bearing the sticker because they are deemed potentially harmful.

The action of the New Jersey group certainly will not be without effect upon the relations of the sticker-using retailers and the manufacturers of products to which the stickers are applied. It is obvious that opinions will differ widely on the potential harmfulness of almost every product in the classes affected, and on the criterions applicable to such classification. Information is not yet available on whether the pharmaceutical organization will compile and distribute a list of products to which the sticker is to be applied or will state the basis of its determination of such status.

It is too early to make even a guess on how soon or how far the red sticker idea will spread to other states. It can be expected, however, that the movement will aggravate the disruption of trade relations which has resulted from controversies over the sale of medicinal and poisonous articles in other than drug stores.

The program of the New Jersey health officials' parley to be held in Trenton March 28 and 29 did not originally have any provision in the direction of the causes or effects of the later-launched sticker campaign. It does not follow, however, that nothing will be said or done there in that connection—the agenda do include consideration of the "emotional aspects" of automobile accidents.

For Industrial Self-Development

In view of successively current reports of decisions more or less to pare programs of expansion laid out about a year ago in numerous enterprises, it would at first sight appear to be somewhat incongruous that a national industrial development exposition is scheduled for May 20 to 24 in New York's Coliseum. But, industrially, as variously otherwise, there is more than a little difference between expansion and development, just as there is between growth and progress. In this instance, the difference can be sensed from the designating of the exposition as a "marketplace where executives, industrial realtors, and management consultants can explore the services offered by local, state, and regional organizations."

Although one of the seminars scheduled in connection with the exposition will have to do with "Financing Plant Expansion"—expansion does have a place in development—the objective is much broader and lies more in areas of location and environment, especially in terms of natural resources. It is emphasized in the announcement of the project that it will afford groups promoting locations and otherwise seeking to attract industrial "settlers" "a unique chance to reach the maximum number of industrial prospects at a minimum cost."

Admission to the exposition will be by invitation only, and limited to industrial executives. But, the promoters say that it is expected to attract something like ten thousand leaders of industry in the several states, Alaska, Puerto Rico, Hawaii, and Canada. Federal agencies are expected to be among the exhibitors at the exposition. There clearly is a place in it for several units of the Department of the Interior. Other prospective exhibitors are reported to include providers of light and power, financing, and transportation.

Another approach of industrial development was the topic of a recent seminar held by executives for discussion of problems of mutual aid organizations and operations deriving from experiences in major industrial disasters. It was sponsored by the Industrial Security Institute and the Kanawha Valley Industrial Emergency Planning Committee. Plans were laid for the establishment of a national council of industrial mutual aid organizations as an ISI affiliate and for the holding of a conference of national scope, perhaps next month.

Despite unfavorable statutory and administrative attitudes toward concerted action in industry and trade, there are opportunities for the doing of much good along that line. There is, for many reasons, much need that those opportunities be fully and effectively utilized.

The Farm Problem Is Commercial

Nobody has yet developed—or informatively suggested — a practicable plan for transferring the farm problem of this country from political to commercial economic consideration. There are big possibilities in that direction in some aspects and ramifications of the growing interest in federal official circles in promotion of a program of research in the industrial utilization of agricultural products. But, that program needs practical development far more than it does even the best-intentioned and most capably handled backing that can be expected under the conflict of legislative and administrative views and attitudes and activities.

Because the real need is for practical development, the National Association of Manufacturers would well and wisely get in close effective collaboration with President Eisenhower's bipartisan group of advisers on increased industrial utilization of agricultural products in that development by way of scientific, technologic, and practical research. The development of polyamide production and utilization on the basis of castor oil referred to here last week is a very convincing case in point.

It has been made quite convincingly clear in the strike of dairy farmers in the milkshed of the New York metropolitan area that the farm market problem is not so much one of finding new uses for agricultural products as it is one of efficient handling of the markets that have existed for centuries. Basically, the problem is one of finding a way to make the farmer understand that he will never get very far in the direction of profitable production as long as he is hooked up wrong-end-to in the supply service of the public. As long as he, the producer, continues more or less contentedly to stay on the payroll of the distributor or processor of what he produces, he will have to take what he gets. That, of course, is one reason why, in common with employees in other lines, he strikes against the welfare and the urgent needs of the public when he is stumped in a similar way in a controversy with his "employer" over a matter of pay, very often complicated by the wholly unnecessary interloping of a third factor in the way of exchange trading or government meddling.

The farmer, as producer, should control the distribution of his products, either by way of direct cooperative service or of channels such as are in operative use in all lines of commercial enterprise. He would be much better served—and so would the public—if the political agricultural agencies at every level would do more than talk about the development of programs for his actual education and guidance toward self-confidence and self-help in the construction of a simple system of distribution as direct as practicable under contributory conditions. In other words, one enabling him to operate a business —at least as a really active partner.

Washington Talks It Over

FDA's Bill on Chemical Additives in Foods Is Now Getting A Final Polishing and Should Be in the Capitol Soon.

By Ralph L. Cherry
Chief, OPD Washington Bureau

The latest word on the Food and Drug Administration's bill for regulating chemical additives in foods is that the measure is still undergoing final polishing by lawyers in the agency and the Budget bureau and will be sent to the capitol shortly. Although this is the same word that was given out several weeks ago (OPD, 2/18/57), there is no reason to believe that the bill is being held up.

Last week the house interstate commerce committee, as is its custom in the early part of each new session, called officials of the FDA before it to report on its activities and to acquaint the new members of the house committee with the agency officials and the agency's aims and accomplishments. The question of the FDA's additives bill was one of the first questions asked.

Rep. Joseph O'Hara of Minnesota, who has been sponsoring the food industry's additives control bill, brought up the matter during the appearance of Commissioner George Larrick on the stand. Mr. O'Hara expressed the "hope that we don't have to wait until the morning of the hearings to receive the views of the department on his (O'Hara's) bill."

Mr. Larrick promised that this would not be the case. He said that the FDA's bill is still in the Budget bureau, but it is just a matter of the lawyers smoothing out the legal language in the measure. He said there are no fundamental differences in the government about the bill and "I anticipate that a bill carrying the recommendations of the department will be submitted to congress shortly."

Red Buying of US Products

Contrary to expectations, last year's easing of restrictions on exports to the Communist areas of Europe was not accompanied by any rush to purchase American products. Actual exports were substantially below the value of the goods licensed to the area under the liberalized rules.

According to Secretary of Commerce Weeks, part of the unshipped goods representing 59 percent of the licensed goods represented time lag and other factors which normally account for differences between licensing and shipment figures. But only part of it. The other explanation is that after US exporters received orders from eastern European sources and obtained export licenses, financial or other obstacles frequently caused cancellation of the shipments.

Tax Amortization Program

The rapid tax amortization program is fast approaching an end. From its peak of 229 expansion goals set up in the Korean crisis, the number has dwindled to twelve and these soon may be cut back to two. These will be goals for expanding laboratories and research facilities for defense purposes, and for production facilities for military and Atomic Energy Commission procurement.

In the six years that the program has been in operation, 21,733 facilities having an investment value at the time the certificates were issued of $37,285,181,000 have been certified as for fast write-offs and of this amount 61 percent or $22,578,-119,000 is eligible for rapid depreciation.

For the past several years, the rapid tax amortization program has been under attack both in the President's cabinet and in congress because of its effect on immediate revenues. Secretary of the Treasury George Humphrey estimates that the program costs the government about $800 million in revenues annually.

Heavy Chemicals

Rock and table salt were advanced last week on spot as a result of increased processing costs. Lithium hydroxide monohydrate was reduced owing chiefly to a competitive situation which has been in existence for some time. Whereas previously the tendency had been to have as many shipping bases as companies, it looked last week like the producers were going over to a delivered basis on pricing.

A producer of refined sulfurs last week boosted prices in bags fifty cents per hundred pounds across the board. Prices become effective on contract April 1.

A producer of barium chemicals last week announced higher prices for barium carbonate and anhydrous and crystal barium chloride, to go into effect April 1.

Chlorine and the alkalies continued in relatively free supply. Producers expressed willingness to take on new business in chlorine, a position they could not have taken only two months ago.

Caustic soda and soda ash were moving at routine levels. Calcium chloride demand was still active at some consumers bought in anticipation of the Scheduled April 1 increase. However, since spring months are normally dull in this market, the projected advance was not expected to bring much stimulus to buying.

Stocks of saltcake at the end of December increased for the first time since the beginning of last year. During that time, reserves declined from over 71,000 tons to 41,000 tons.

Sulfur output in 1956 reached a record total. New highs in production were established for both native and recovered material.

The American Paper and Pulp Association reported production for the week ended March 2 at 95.8 percent of theoretical capacity, as compared with the revised figure of 97.0 percent for the previous week, and 102.1 percent for the corresponding week of last year.

Price Trends

Advanced

Potassium stannate, ½c. per lb.
Salt, rock, 3c. per lb.
table, 3c. per lb.
Sodium stannate, ½c. per lb.
Stannic chloride, ½c. per lb.
Stannous chloride, anhydrous, 6/10c. per lb.
hydrous, cryst., ½c. per lb.
Sulfate, 6/10c. per lb.
Sulfur, refined grades, 50c. per cwt.
Tin, 1c. per lb.

Lithium hydoxide, monohydrate, 2c. per lb.
Platinum, $8 per oz.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
104.13	104.26	103.84	101.19

For Current Prices see Page 9

Acid, Chromic—Material continued to move out in good volume to plating interest connected with the automotive industry. However, it was felt that business volumes were not equal to those of last year at this time.

Acid, Hydrochloric — While steel has not been operating at capacity levels the past few weeks, production has been such that large volumes of hydrochloric acid have been consumed.

The price position of this acid continued subject to a number of local factors, chief of which has been keen competition due to large output of byproduct muriatic.

Firmer prices recently established in the south and southwest on this material appear to have held fairly steady. The market was subject to shading in the New York area, however.

Acid, Hydrofluoric — Demand from stainless steel producers kept this market strong. Other end uses were called less active than previously, although a pickup in demand for glass and fluorinated hydrocarbons was anticipated for the near future.

Acid, Phosphoric—Consumption of this material for fertilizer use has picked up, but not at a rate satisfactory to some observers.

There was still some optimism, however, since during the past few years fertilizer buying has returned to a hand-to-mouth basis, and demand could develop rapidly any time between now and spring.

Acid, Sulfuric—Steel inquiry held up strongly. Rayon interest was described as routine. Steel output last week declined to an estimated 94.4 percent of capacity, according to the American Iron and Steel Institute.

This compares with 2,456,000 tons, or 96 percent of capacity the previous week, and 2,462,000 tons, or 100 percent of 1956 capacity a year ago last week.

Chlorine—The opinion of most sources was that while this market was in reasonably good balance, chlorine was freely available to new customers.

Barium Carbonate—A producer announced last week that effective April 1, prices for precipitated barium carbonate will be increased to $106.50 per ton, carlots, f.o.b. works, freight equalized, and $121.50 less carlots, same basis.

Barium Chloride—A maker of anhydrous and crystal barium chloride has announced a price increase effective April 1. Anhydrous will be advanced to $176 per ton, bags, carlots, f.o.b. works, freight equalized, and $191 per ton, less carlots, same basis.

Technical crytals will be raised to $7 per hundred pounds, bags, carlots, f.o.b. works, freight equalized, and $7.75 per cwt., less carlots, same basis.

Lithium Chemicals—The market was in a confused state last week, as a producer announced lower prices for lithium hydroxide monohydrate.

Price was reduced to 78c. per pound in any quantity from previous prices of 80c. to 81½c. per pound, depending on amount. The market has been in a state of keen competition for some time, and the reduction was seen a result of the competition.

The confusion lay primarily in shipping terms. Three different bases were formerly used: f.o.b. works; f.o.b. works, freight allowed to destination, and delivered.

Last week, although a great deal of uncertainty still existed, it was felt that specifications were narrowing down to a delivered basis.

Two firms announced that they were pricing material at 78c. per pound in quantities of one drum or more, delivered.

Other chemicals in the lithium group, while not changed in price as of last week, were admittedly involved in competitive situations. These included carbonate and chloride. It was felt that there might be chances in these materials soon.

Salt—Effective last Monday, rock and table salt were increased 3c. per hundred pounds across the board. Rock was newly quoted at $1.07 per cwt., bags, carlots, f.o.b. New York area, and table, $1.32 per cwt., same basis.

The increase was not due to higher freight rates but rather to increased costs of production and handling.

Soda Ash—Buying interest for dense ash was only moderate during the week. The glass industry operated at routine levels, and preparations were being made for increased production of beverage bottles for the summer trade.

Light ash inquiry for use in the manufacture of phosphates began to pick up during the week. This situation was thought partly due to preparations by fertilizer manufacturers for the spring season.

Paper industry demand held up strongly, even though production levels this year have been running somewhat below last year at this time.

The aluminum industry continued to show good call, although sharp power cutbacks in some areas of the northwest curtailed output of metal.

Exports of soda ash in December declined slightly, to 47,700,905 pounds from 48,100,812 pounds in November, according to figures compiled by the Tariff Commission.

Synthetic sodium carbonate production in December declined considerably, and daily output totaled 12,700 tons as against 13,400 tons in November. December operating ratio dropped to 79 percent of

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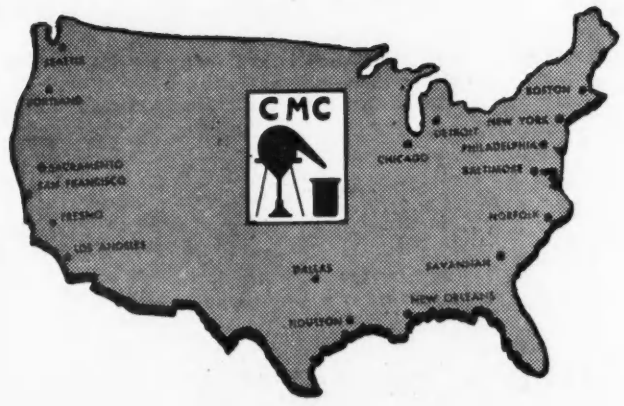

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Heavy Chemicals

capacity, compared with 84 percent in November.

Reports from foreign markets indicated that supplies of aluminum were catching up with worldwide demand so rapidly that a surplus is already in sight.

Marginal sales by American producers in European markets reportedly have been made at prices lower than an established Canadian price of 25c. per ingot pound.

Soda, Caustic—Reports on demand for this material continued to vary considerably, depending on the position of a particular producer.

Some sources reported business at merely routine levels during the week, while others indicated that sales so far this year for a number of end uses had been quite brisk.

It was apparent to most observers that there was plenty of material on hand to fill consumer needs. Export business in some instances was still lively as a result of the Suez crisis, and the consequent tightening of shipping space for caustic soda from Europe to Latin America.

Sodium Phosphates—As yet, there was no sign of projected increases for the higher phosphates for the second quarter, although costs of raw materials have been steadily rising since the last increase.

Sodium Sulfate—Saltcake stocks at the end of December rose sharply, the first increase since a long decline that started in January, 1956.

Stocks in the hands of producers December 31 increased to 48,879 tons, from 41,412 tons on hand at the end of November, according to figures compiled by the Bureau of Census.

Sulfur—A producer of refined sulfurs last week increased bags 50c. per hundred pounds across the board. Barrel prices were increased 60c. per hundred pounds, with the exception of barrel prices for roll sulfur, which went up 70c. per cwt.

Following are new prices; NF flowers, $4.74 per cwt., bags, mines; barrels, $6.10; light flour, $4.35, bags, and $5.35, barrels; refined lump, $4.05, bags; rolls, $4.60, bags, and $5.35, barrels; salt block, $4.25, bags; virgin block, $4.20, bags.

Rubbermakers' refined, $4 per cwt., bags, mines, and $5.15, barrels, same basis. Prices are effective immediately on spot, and April 1 on contract.

Tin Salts—With higher tin, potassium stannate was quoted at 77.6c. to 84.8c. per pound; sodium stannate, 63.3c. to 69.2c.; stannic chloride, 79c. to 80c.; oxide, $1.04 to $1.05; anhydrous stannous chloride, $91.5c. to $1.409; hydrous crystals, 80c. to 81c.; and sulfate, $1.05 to $1.07,

Nonferrous Metals

Aluminum—January output declined to 147,030 tons from 148,391 tons in December, according to the Aluminum Association. Output in January, 1956, was 140,394 tons.

The all-time record quarter for aluminum production was the fourth quarter of 1956. During that three-month period, some 442,597 tons of aluminum were produced.

Copper—Market was quiet and steadier. Primary producers' copper held unchanged at 32c. per pound, delivered US destinations, for electrolytic.

Mercury—Market was quiet, and stocks continued to be closely held. Metal was quoted at $255 to $257 per flask, spot.

Platinum—Metal declined last week, and was offered at $92 to $95 per ounce, spot.

Silver—Bullion was listed at 91⅜c. per troy ounce, spot, on Friday.

Tin—Activity was limited to buying for immediate needs. Straits metal was quoted at 99⅝c. per pound, spot, on Friday.

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DuPont Names Directors, Others Also Appointed

E. I. duPont de Nemours & Co., Wilmington, Del., has named W. Samuel Carpenter, 3rd, as director of petroleum chemicals division sales, succeeding David H. Conklin, who becomes managing director of duPont Company (United Kingdom), Ltd.

Mr. Carpenter joined duPont's engineering department in 1938. He was assigned to the construction department in 1944 and became manager of that department's planning division in 1946. In 1950 he was named assistant manager of the planning division of the rayon department and in 1955 was made assistant director of sales for the petroleum chemicals division.

Mr. Conklin joined duPont in 1947 and was soon after named west coast district manager for the petroleum chemicals division. In 1949 he became assistant sales manager of the division; in 1951 he was named assistant director of sales and in 1953 was made director of sales. Before his work with duPont he had been employed by Ingersoll-Rand.

Other personnel changes in the petroleum chemicals division resulting from the promotions follow:

Alfred R. Mullis, eastern regional manager, will replace Mr. Carpenter as assistant director of sales.

Earl G. Bennett, now manager of the central region, will become the new eastern regional manager.

Donald W. Frison, manager of the mid-continent region, will move into the central region post vacated by Mr. Bennett.

Charles D. Towery, manager of the Gulf coast region, will take over the management of the mid-continent region in addition to his present position.

R. Carter W. Jones, sales promotion manager of the petroleum chemicals division, has been named to the new position of sales service manager. He will be responsible for the operations, sales promotion, export sales, office, and general sales sections.

Harold C. Thompson, who is now assistant sales promotion manager, will succeed Mr. Jones as sales promotion manager.

Air, Water Pollution

—*Continued from page 7*

a division of Union Carbide & Carbon Corporation.

"Assimilation of Organic Pollutants in Natural Waters," by A. J. Gabaccia and H. W. Senn, of Lederle Laboratories Division of American Cyanamid Company.

The program on the second day will begin with a paper on "Developing Company-Wide Interest in Air Pollution Abatement," by William R. Bradley, of American Cyanamid Company.

This will be followed by a panel discussion on "Incineration of Organic Sludges and Chemicals," with the following participating: Dr. E. C. Mirus, National Aniline Division of Allied Chemical & Dye Corporation; J. T. Garrett, Monsanto Chemical Company, and Robert F. Rocheleau, of the engineering service division of E. I. duPont de Nemours & Co.

Following a coffee break, these papers will be offered:

"Design of a Sedimentation Type Treatment Plant," by H. W. Eustace and R. J. McVeigh, of Eastman Kodak Company.

"A Case History of Water Pollution Abatement," by Harry F. Ahern, of Monsanto Chemical Company.

After luncheon, Dr. Ralph E. Fuhrman, executive secretary of the Federation of Sewage and Industrial Wastes Associations, will speak on "Cooperation in Water Pollution Control."

Sterling Studying

—*Continued from page 3*

Works is the key plant in the treatment system that was acclaimed one of the "Seven Wonders of American Engineering" in 1955 by the American Society of Civil Engineers.

The Zimmerman Process has been tested and proved in the treatment of waste pulp liquors from industrial plants. Laboratory tests on domestic and industrial sewage are equally promising, it is pointed out.

"Our engineers and chemists are enthusiastic," Superintendent Dundas says. "This process holds promise of reducing the cost of one of the most expensive steps in the treatment and disposal of sewage solids. The end products after the simple 'wet combustion' of the Zimmermann Process are water with an acceptable chemical oxygen demand, and a small amount of non-offensive ash.

Under the present process used by the sanitary district—in itself, a pioneering effort in the search for a healthful, economical way to dispose of wastes—the sewage solids are separated from the water vehicle in a series of steps, including the addition of chemicals, filtration, and heat drying. The end product is a commercial fertilizer.

Mr. Olis says the cooperative research venture is another step in the district's historic search for the ultimate method of sewage disposal. "If this is it," Mr. Olin says, "the costs of sewage disposal will be cut substantially. It can mean a savings of millions of dollars to the taxpayers of this area."

Serves 104 Cities

The Metropolitan Sanitary District serves 104 cities and villages, including Chicago, in an area of more than 900 square miles with a population of more than 5 million and an additional industrial sewage load equivalent to 3.5 million persons.

Lynch Retires From PCB

Joseph C. Lynch, chief accountant of Pacific Coast Borax Company Division of United States Borax & Chemical Corporation, New York, has retired after forty years of service. Mr. Lynch joined the Pacific Coast Borax organization June 1, 1916, as a clerk, and later was advanced to credit manager and chief accountant. He will represent the firm at the Miami, Fla., convention of the National Association of Credit Men in May.

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Di-isocyanate Being Offered For Developmental Purposes

"Nacconate 310," dimethyldiphenylmethane diisocyanate, is now available in developmental quantities from National Aniline Division of Allied Chemical & Dye Corporation, New York. This new "Nacconate" is unique in that it forms relatively stable water emulsions, has an unusually low reaction rate and low vapor pressure, National Aniline reported.

National technical bulletin I-17F gives six pages of detailed data on "Nacconate 310" covering structural formula, analysis, properties and suggested uses. It also includes a valuable infrared spectrogram, vapor pressure curve and a chart showing the reactivity rates of "Nacconate 310" in comparison with "Nacconate 300" and "Nacconate 80."

Sun Appoints Secretary

Stuart Z. Krinsly has been named secretary of Sun Chemical Corporation, Long Island City, N. Y. Mr. Krinsly is a partner in the New York law firm of Schlesinger & Krinsly and is a member of the New York Bar Association. He is also a director of Ketchum & Co.

Paper From Synthetics

—Continued from page 7

companies, the use of synthetic fibers in papermaking has grown from laboratory production to semi-commercial availability in three years.

Pioneered by duPont, synthetic-fiber paper has little resemblance to the "paper" on the newsstand. The term is applied because it is manufactured on conventional papermaking machinery.

A more apt definition might be "nonwoven bonded paper-like structures." A diversified range of appearances and characteristics is possible, ranging from drapable fabric and felt-like structures to crisp papers or tough parchments.

Papers made from synthetic fiber show excellent resistance to corrosive chemicals, bacteria, heat and moisture, as well as high strength, outdoor durability, excellent dimensional stability, and good dielectric properties.

Little Encroachment

Because of their unique properties, synthetic fiber papers will be confined to specialty paper markets and those markets now held by woven fabrics. There will be little encroachment on existing paper fields.

While a number of production problems remain to be solved, their solution appears imminent and emphasis has now been placed on end use studies. Industrial end uses with considerable promise, many of which are now being field tested, include electrical insulation, backings for coated fabrics, map and chart paper, filtration, light-duty tarpaulins, replacement for multi-wall bags, and felt-like structures for low and high pressure laminate reinforcing batts, according to duPont.

Apparel and home furnishings markets also suggest potential end uses like rug backings, draperies, skirts, auto panels and headliners, and shoe fabrics.

While research has shown that specialty papers with a wide range of physical and functional properties can be prepared from synthetic fibers and from blends of synthetic fiber and pulp, they will cost more than conventional papers. Preliminary and use studies, however, indicate they can compete in applications where their properties offer specific advantages, duPont said.

Metal & Thermit

—Continued from page 3

ical products which have a sales volume of approximately $4.5 million," Mr. Martin declared. "By 1966," he said, "it is hoped that this figure will rise to 7 million pounds which have a sales value of about $13 million.

"An enormous potential lies ahead for the chemical field," he added, pointing out that from the long-term viewpoint "Metal & Thermit plans to augment the favorable outlook for organic tin chemicals by producing other chemicals from metals."

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Current Market Quotations

—Continued from page 32

Zinc chloride, NF, gran., dms.	lb.	.42	—
precip., powd., dms.	lb.	.26	—
soln. 50% dms., c.l., works.	100 lbs.	5.80	—
l.c.l., works	100 lbs.	6.40	—
tanks, works	100 lbs.	5.15	—
tech., fused, dms., c.l., works.	100 lbs.	10.70	—
l.c.l., works	100 lbs.	11.20	—
gran. fib. dms., c.l., works	100 lbs.	11.45	—
l.c.l., works	100 lbs.	11.95	—
Chromate (see Yellow, zinc).			
Cyanide, kgs., 1,000-lb. lots or more, works	lb.	.523	—
smaller lots, works	lb.	.543	—
Dust, pigment, bbls., c.l., works	lb.	.17½-	—
l.c.l., works	lb.	.18½-	—
Fluoride, bbls., works	lb.	.49	.50
Hydrosulfite, dms., c.l., frt. alld.	lb.	.22	—
l.c.l., frt. alld	lb.	.24	—
Metal, prime western, slabs, E. St. Louis	lb.	.13½-	—
New York	lb.	.14	—
Naphthenate, liq., 8% Zn., dms., frt. Alld	lb.	.24½-	—
10% Zn. dms., frt alld	lb.	.30	—
Nitrate, tech., cryst., bbls., works.	lb.	.20	—
Oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½-	—
l.c.l. same basis	lb.	.15½-	—
leaded, 35%, bgs., c.l., mills, frt. alld	lb.	.15½-	—
l.c.l., same basis	lb.	.16½-	—
50%, bgs., c.l., same basis	lb.	.15⅞-	—
l.c.l., same basis	lb.	.16⅞-	—
French process, coml., green seal, bgs., c.l., frt. alld	lb.	.15¾-	—
l.c.l., same basis	lb.	.16¾-	—
red seal, bgs., c.l., same basis	lb.	.15¼-	—
l.c.l., same basis	lb.	.16¼-	—
white seal, bgs., c.l., same basis	lb.	.16¼-	—
l.c.l., same basis	lb.	.17¼-	—
USP, ctns., c.l., frt. alld.	lb.	.17¼-	—
l.c.l. same basis	lb.	.18¼-	—
Zinc oxide Pac. Coast prices 1c. higher.			
Phenolsulfonate, NF gran., dms.	lb.	.43	.44
powd., dms	lb.	.46	.53
Resinate, precip. 7.2-7.6% Zn., dms., frt. alld.	lb.	.29	—
Silicofluoride, dms., works	lb.	.12½-	.14
Stearate, tech., USP, ctns., c.l.	lb.	.41	—
l.c.l.	lb.	.42	.46
Sulfate, powd., monohydrate, 36% Zn bgs., c.l. dlvd E	100 lbs	8.75	—
l.c.l., dlvd E	100 lbs	9.75	—
Zinc sulfate in bbls. 40c higher.			
USP gran dms	lb	26	—
Sulfide pure bgs., c.l., dlvd	lb	2530-	—
Undecylenate, dms	lb.	2.00	—
Yellow (see Yellow, zinc).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls., c.l., works	100 lbs.	10.85	—
l.c.l., works	100 lbs.	11.35	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l	lb	.25½-	—
l.c.l.	lb.	.26	—
Zircon (G), gran., bgs., c.l., works.	lb.	.03⅛-	—
5 tons to c.l., works	lb.	.03⅜-	—
1 ton to 9,999-lb lots, works.	lb.	.04	—
smaller lots works	lb.	.06½-	—
Milled, bgs., c.l., works	lb.	.04⅛-	—
5 tons to c.l., works	lb.	.04⅜-	—
1 ton to 9,999-lb lots works	lb	.04⅝-	—
500-1,999-lb. lots, works	lb	.07½-	—
Zircon (G) in barrels 1c higher.			
Zirconium acetate, 13% soln., ZrO_2, c.l. 30,000 lbs minimum, works	lb	.23	—
Hydride, cns., works	lb.	7.00	8.45
Nitrate, dms., ex whse	lb.	4.50	7.00
Oxide 92½-99%, white grd., bbls. or bgs. works	lb.	1.50	—
lump, electric-fused, bgs., lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb.	.44½-	—
1 ton to 9,999-lb. lots, lbs., works	lb	.45	—
CP, white, grd., bbls., or bgs., works	lb.	1.50	—
lump, electric fused, bags, 500 to 1,999-lb. lots, works	lb.	.45½-	—
smaller lots, works.	lb.	.48	—
milled, electric-fused, bgs., c.l., works	lb.	.59	—
5-ton lots, works	lb.	.59½-	—
1 ton to 9,999-lb. lots, works	lb.	.60	—
500 to 1,999-lb. lots, works	lb.	.60½-	—
smaller lots, works.	lb.	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb.	.35½-	—

Drugs, Medicines

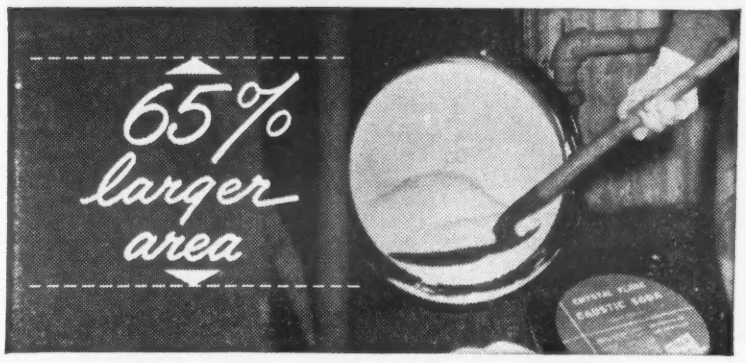
—Continued from page 4

month period reported awards under the act amounting to about $40 million for products of the industry, which employs about 43,000 covered production workers in 428 establishments having ten or more employees.

The hearing will begin at 10 a.m. in Room 1214, Department of Labor Building, Washington. Persons who intend to appear should give advance notice to Newell Brown, administrator of the department's wage and hour and public contracts divisions.

Statements filed in place of personal appearance should give reasons for not appearing and if they contain facts, should be sworn to. Such statements, consisting of an original and three copies, may be filed with Mr. Brown any time before April 2.

Especially desired are data showing the minimum wages paid, the number of workers paid the minimum rates, entrance rates for beginners or apprentices, the extent of competition among establishments in different geographic areas, and the adequacy of the proposed definition of the industry.



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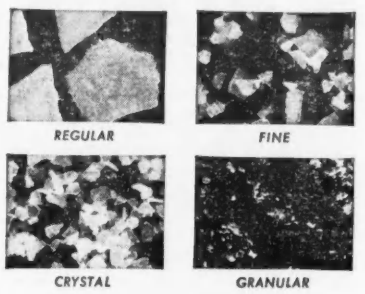

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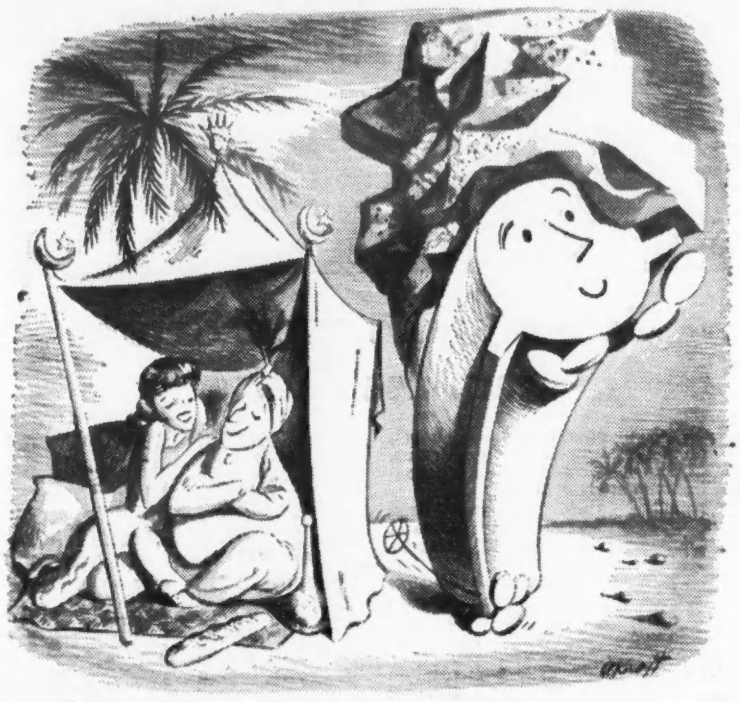

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Jobs & People

Bristol-Myers Products Division, Hillside, N. J.—**Dr. Dan Dahl,** assistant vice-president in charge of product planning of Bristol-Myers Products, has retired after eleven years of service with the company.

Carbide & Carbon Chemicals Company, New York, division of Union Carbide & Carbon Corporation—**N. E. Bolton, Dr. R. B. Gosnell, R. J. Hanna, Miss M. A. Stephens** and **G. W. Warren** have joined the development department of Carbide's South Charleston, W. Va., plant.

Celanese Corporation of America, New York—**Kirk E. Smith, Edward M. Fox** and **John W. Bloom** have been appointed sales representatives for the plastics division of Celanese, working out of San Francisco, Leominster, Mass., and Cleveland, Ohio, respectively.

Chemstrand Corporation, Decatur, Ala.—**Marlin C. Brown** has been promoted to the newly-created post of freight traffic manager for Chemstrand.

Diamond Alkali Company, Cleveland, Ohio—**Jack E. Davis** has been made special staff assistant in Diamond's sales department.

Diamond Black Leaf Company, Cleveland, Ohio—**Charles C. Yent** has been named manager of manufacturing operations for Diamond Black Leaf.

Escambia Chemical Corporation, New York—**Erhart K. Dreschsel** has joined Escambia Chemical and will devote full time to commercial chemical development activities.

Fritzsche Brothers, Inc., New York—**George T. Ammersbach,** technical director of Fritzsche's perfume division, is now contacting the trade as a special service to customers whose perfuming problems can be best handled by on-the-spot consultation.

General Electric Company, Waterford, N. Y.—**K. Jerry Morray** has been named manager of the Cleveland, Ohio, sales district of GE's silicone products department.

Hawthorn Chemical Corporation, Wilmington, Del.— **Herbert F. Schaefer** has been named senior technical service representative for Hawthorn, jointly owned firm of Hercules Powder Company and Imperial Chemical Industries, Ltd.

Hercules Powder Company, Wilmington, Del.—**John P. Durkin** has been named assistant comptroller of Hercules.

Kaiser Aluminum & Chemical Corporation, Oakland, Calif.—**E. H. Sangwine** has been appointed manager of Kaiser's new $70 million alumina and caustic-chlorine production facilities now under construction near Gramercy, La. **Walter H. Bast** has been named to succeed Mr. Sangwine as works manager of the company's Chalmette, La., reduction plant.

Lithium Corporation of America, Minneapolis, Minn. — **Salisbury Adams,** Lithium Corporation's general counsel and secretary, has joined the firm on a full-time basis.

Merck & Co., Rahway, N. J.—**Raymond G. Anderson,** manager of the Philadelphia branch office for Merck's chemical division since 1925, has retired after completing forty-two years of service with the company.

Solvay Process Division, Allied Chemical & Dye Corporation, New York—**Frederick Nill** has been named assistant to Solvay's director of development.

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Obituaries

William Ayres Aglar Cook

William Ayres Aglar Cook, founder and chairman of Topics Publishing Company, publishers of *Drug Topics* and other trade publications, died March 4 in Mountain Lake, Fla. He was sixty-seven years old.

Mr. Cook was a co-founder with the late Jerry McQuade of Topics Publications in 1920. He served as president until 1950 when he became chairman of the board. Publications issued by the company include *Drug Topics, Drug Trade News, Drug Topics Red Book, Food Field Reporter* and *Food Topics.*

Mr. Cook entered the trade publication field in 1915. He worked for various publications including *Hardware Reporter, Hardware Age* and *Electrical Record* before the founding of his concern.

His interests embraced the food and drug industries and he was also identified with other industrial enterprises, particularly hotels in New York.

John T. Edgerly, staff assistant in the automotive refinish sales organization of the fabrics and finishes department of E. I. duPont de Nemours & Co., died March 3 in Indiana, Pa. He was sixty-three years old.

Robert E. Hodgkin, former vice-president of Ayerst Laboratories, New York, died February 1 in Montreal. He was fifty-two years old. He joined the parent firm, Ayerst, McKenna & Harrison in Canada in 1935 and was appointed to the vice-presidency of the American subsidiary in 1952.

Eric A. Lof, an electrical and chemical engineer formerly associated with American Cyanamid Company, General Electric Company and Western Electric Company, died March 6 in New Rochelle, N. Y. He was seventy-one years old.

Kenneth W. Merkel, sr., consulting perfumer previously associated with Colgate-Palmolive Company, died February 3 in Fort Lauderdale, Fla. He was sixty-one years old.

Conn. Chemical Research Sales Post Goes to Rader

Connecticut Chemical Research Corporation, Bridgeport, Conn., has appointed Charles O. Rader sales manager of the contract packaging division.

For a number of years, Mr. Rader was supervisor of the drug division of Lever Brothers and sales promotion manager of the tar products and chemical division of Koppers Company.

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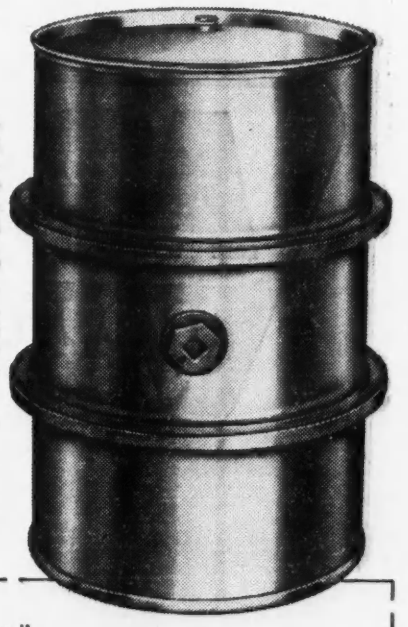

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LOS ANGELES Richmond 8-5207
MONTREAL REgent 1-6451
NEW YORK Murray Hill 7-1530
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Petroleum Derivatives

Producers and marketers of solvents are watching the market closely but as yet have taken no action on the 1½c. per gallon advance posted recently for toluol and xylol by a leading competitor. The advance was made effective March 1 on spot business and thirty days later on contract orders. All of the shipping points of the refiner were equally affected by the increase, except Providence, Rhode Island, where quotations were advanced only ½c. per gallon.

In respect to sales, the solvent market has been holding up satisfactorally, producers report. A heavy volume of benzol imports continues to move into the country, finding a ready market. According to producers here, sales of domestic material have not been appreciably affected by the imports. Supply levels of toluol and xylol are somewhat high, producers note, but the materials have been moving steadily enough to prevent development of a troublesome oversupply. Benzol is in a position of good balance.

The Bureau of Mines last week reported December production of gas liquids at 34.9 million gallons, an increase of 4 percent over December of the previous year. During the same month, the Bureau noted, production of liquefied gases at refineries climbed 14 percent higher than a year ago.

In another report by the Bureau of Mines, December production of crude oil was tabbed at 7,377,000 barrels per day, or an increase of 238,000 barrels daily over November. The average for the year, the Bureau said, was 7,151,000 barrels daily, a 5.6 percent gain over 1955.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
107.65	107.65	105.71	104.37

For Current Prices see Page 9

Solvents and Diluents

Benzol—No price action has been taken on this solvent in connection with the higher cost of crude oil. This contrasts with toluol and xylol, both of which were advanced recently by one of the major refiners.

In respect to sales, the market is holding its own quite well against competitive solvents. A heavy volume of imports is moving into the country and finding a ready market. According to producers here, movement of domestic material is not appreciably affected by the imports. Since petroleum makers are not obliged to produce any more benzol than solvent customers require, the industry has been able to keep its supply in close balance with the market.

Cleaner's Naphtha—This aliphatic was advanced 1c. per gallon at the beginning of the quarter to offset the increase in prices of crude oil. Local conditions on the West Coast induced producers there to limit the naphtha increase to ½c. per gallon.

Business volume has been steady and normal since the last holiday season. Supplies are adequate for all trade requirements.

Toluol—As reported here last week, buyers have been notified of a 1½c. per gallon advance, effective immediately on spot and thirty days later for contract customers. As yet, only one refiner, a major factor in the field, has announced the advance. Others are looking over the situation but have not reported any firm intention yet as to what action they will take.

VM&P Naphtha—The higher prices that were set two months ago have been reported steady at all shipping points. Supplies are in good balance with seasonably moderate buying interest.

Xylol—This is one of the two solvents that were recently advanced by a leading oil refiner. The increase called for a 1½c. per gallon hike at all of the company's shipping points except Providence, Rhode Island. Quotations at the latter point were raised ½c. per gallon.

Other xylol producers and marketers are still appraising the situation and have made no commitment yet concerning comparable price advances, it was reported.

The supply level in the petroleum industry is a little looser than in the coke-oven field, producers note, but the material has been moving steadily enough to prevent development of a troublesome oversupply.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended February 16 totaled 250,525 barrels, according to data reported to the Bureau of Mines. Compared with the total of 250,927,000 barrels of the preceding week, this represents a decrease of 402,000 barrels, comprising an increase of 798,000 barrels in stocks of domestic crude and a decrease of 1,200,000 barrels in stocks of foreign crude.

Lighter Fractions

Daily average output of natural gas liquids was 34.9 million gallons in December of last year, an increase of 4 percent over December 1955, the Bureau of Mines reported last week. In the same month, production of liquefied gases at refineries climbed 14 percent higher than a year ago, the Bureau reported. Stocks declined by 80 million gallons during the month, totaling 619 million gallons on December 31. These stocks were 303 million gallons greater than a year ago, the Bureau pointed out.

Butane—Output of this material during December totaled 174,230,000 gallons—133,490.000 gallons at plants and 40,740,000 gallons at refineries—the Bureau of Mines reported last week. On December 30, stocks at plants, terminals and underground stood at 145,015,000 gallons, as compared with 154.783,000 gallons on November 30. Refinery stocks totaled 31,332,000 gallons on December 31, as against 27,594,000 gallons on November 30. Deliveries for gasoline use during the month were reported at 109,861,000 gallons. Shipments for other uses amounted to 70,399,000 gallons, the Bureau noted.

Propane — Production of this gas at plants in December totaled 300,104,000 gallons, while refinery output amounted to 111,468,000 gallons, the Bureau of Mines reported. Combined production was 411,572,000 gallons, the Bureau noted. On December 31, stocks at plants, terminals and underground stood at 380,345,000 gallons, having declined seasonally from the 459,861,000 reported on November 30. Refinery stocks added up to 20,370,000 gallons on December 31, as against 17,472,000 gallons on November 30. Deliveries for gasoline use during the month were reported at 4,200,000 gallons, while shipments for other uses amounted to 483,990,000 gallons.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended February 15, 1957, indicate an increase in crude-oil production and a decrease in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 7,515,000 barrels, an increase of 54,000 barrels from the preceding week. Daily average crude runs to stills of 7,976,000 barrels were 143,000 barrels below the preceding week, and 13,000 barrels below the week ended February 17, 1956. Runs of foreign crude amounted to 908,000 barrels daily, compared with 827,000 barrels in the preceding week. For the four-week period ending February 15, 1957, crude oil production averaged 7,449,000 barrels daily and crude runs to stills averaged 8,122,000 barrels daily with runs of foreign crude averaging 811,000 barrels daily.

Crude oil production in Saudi Arabia during January totaled 20,621,338 barrels, for an average of 665,204 barrels per calendar day, it was reported last week. This compares with output of 31,007,394 barrels, averaging 1,000,239 barrels per calendar day, during the same month last year.

Butadiene Plant Sale Measure Stalled in Senate

—Continued from page 3

sub-committee to hold up action on the measure.

This commission, which was set up by the President under authority contained in last year's soil bank law, has been at work since last December making a broad study of the possibilities of expanding the use of farm products through research. It is scheduled to file its report and recommendation with the White House and congress by June 15.

In a letter to the senate committee, prepared after a hurried telphone call from the committee for its views on the legislation, the commission acknowledged that it had a potential interest in th matter of disposing of the plant but at the moment it could not define the extent of this interest because it has not yet completed its overall studies.

It added, however, that if the plant is ordered sold before the commission is able to submit its report, the commission would thereby be foreclosed from the possibilities of including the plant in any of its recommendations. Therefore, it asked that the action on the bill be deferred until the report is filed.

Early Support From Capehart

The commission's request appeared to find immediate support in Sen. Homer Capehart of Indiana, one of the leaders in the fight for a broad program of research on agricultural products, and from Chairman Douglas. Sen. Thurston B. Morton of Kentucky, proponent of the early sale of the plant, attempted to recapture some of the support for the bill by noting that congress still would have thirty days to veto a sale after the contract has been drawn up, but other members of the committee could not understand why a delay of ninety days would make the plant any less attractive to a potential buyer, especially since it is presently under lease to Publicker Industries, Inc., Philadelphia, until April 4, 1958.

A chief spokesman for the government in behalf of the bill was Laurence B. Robbins, assistant Secretary of the Treasury and Administrator of the Federal Facilities Corporation, which is handling the leasing of the plant.

In his testimony, Mr. Robbins emphasized that the military and Office of Defense Mobilization have both agreed that the plant is not needed by the synthetic rubber industry even should the country be forced into a state of full mobilization. The present and potential capacity of the petroleum industry to produce butadiene, plus the fact that the other alcohol butadiene plant at Kabuta, Pa., which was sold to Koppers Company, can be called upon for butadiene whenever necessary, he said.

In further support of the argument that the plant should be sold as quickly as possible, Mr. Robbins explained that under the lease contract with Publicker, the government has the burden of paying the maintenance cost and taxes on that part of the plant not in operation. From April 5, 1955, when Publicker leased the plant through December 31, 1956, he said, the government received in rental only $140,702 and paid out over the same period $462,524 for maintenance and taxes.

Publicker closed down operations of the plant last October and stated in recent lease negotiations that because of the molasses supply situation it foresaw no possibility of any operation in 1957. That being the case, Mr. Robbins added, the government can expect to pay out about $342,000 for maintenance and taxes in 1957 and receive in return only the guaranteed rental of $12,000.

Publicker Opposes Legislation

Laurence R. Brown, assistant to the president of Publicker, testified in opposition to the legislation, stating that the deal was not in the public interest, and hinting that Publicker has some plans for future use of the plant in connection with the government program on surplus grain.

He said that the deal was unnecessary because what can be accomplished under its terms can be accomplished without changing the law after Publicker's lease expires next April. He added that the plant could be disposed of under a more liberal security clause than that proposed in the bill.

Stein, Hall Elects Two

Election of Joseph C. Blauvelt as a director and S. Crawford Bonow as a vice-president of Stein, Hall & Co., Inc., New York, has been announced.

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Aliphatic Organics

A leading producer last week announced increases effective April 1 amounting to ¾ cent per pound across the board on technical, CP and X grades of carbon tetrachloride, methyl chloride, technical (or refrigeration) grade methylene chloride, industrial and dry cleaning grade perchloroethylene and 1,1,1-trichloroethane. It was also learned that a major producer will increase prices for trichloroethylene by roughly ¾ cent per pound effective April 1 in order to offset increased costs of labor, raw materials, containers and handling.

The once lively market for fermentation lactose for manufacture of penicillin was now feeble.

Demand for USP lactose has been steady, while plant capacity has grown substantially. The result has been oversupply of USP material.

Imports of foreign milk sugar have been curtailed sharply in recent months, implying that foreign producers have found an unattractive market in competition with domestic producers at current domestic prices.

Output of n-butyl alcohol in December was much greater than in any other single month in 1956, Tariff Commission figures showed. Demand has been very strong, with about one-half of the material consumed moving into surface coatings, much of the balance going into butylated urea resins. In particular, dibutyl phthalate has proved an important outlet.

Demand for butadiene remained firm, but new production plant has been coming on so fast that some trade sources were doubtful that supply and demand could be held in balance in the next year or two.

Commercial and military business provided heavy support for the market in methanol. Current production quotas were keyed high, but producers' stocks were limited to only six or seven weeks' supply at current rate of consumption. Substantial additions to plant capacity were under development or in the planning stage.

Both the technical and the purified monochloroacetic acid were moving in better volume than they did a year or two ago, trade sources reported.

Price Trends

Advanced
None.
Reduced
None.
Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 9 1956
131.08	*131.08	131.12	130.98

* Revised.

For Current Prices See Page 9

Butadiene—The market remained quite firm last week. However, new production plant has been coming on at a rapid rate, and it was uncertain what sort of balance there would be between supply and demand over the next year or two. For the present, there was adequate material to cover immediate requirements. Prices were steady at an average of 15c. per pound in bulk.

n-Butyl Alcohol—Demand was strong last week, with about one-half of the material consumed going into surface coatings. In general, manufacture of butylated urea resins was providing solid market support. Dibutyl phthalate, in particular, figured as an important market outlet. Prices were steady and unchanged. There was sufficient supply to satisfy consumers' immediate requirements.

A record high 25,664,110 pounds of primary n-butyl alcohol was produced at domestic plants in December, the Tariff Commission reported. Easily the highest figure reported for production in any month during 1956, the December figure was almost half again as great as the 17,425,856 pounds reported produced in November and substantially greater than that for the second biggest month, some 22,751,513 pounds turned out during May.

The aggregate production for calendar year 1956 was brought to 230,457,206 pounds. That for calendar year 1955 was 227,811,770 pounds.

Carbon Tetrachloride—Technical, CP and X grades will be advanced ¾c. per pound across the board effective April 1, leading producers announced last week.

New quotations on technical material on a freight allowed basis will be 10¾c. per pound in tankcars, 11¼c. per pound in tank trucks, 11¾c. per pound in carlots and trucklots and 14¼c. per pound in less carlots and less trucklots.

For CP material, freight allowed basis, they will be 12¾c. per pound in carlots and 15¼c. per pound in less carlots.

Also on a freight allowed basis, new prices for X grade carbon tet will be 11c. per pound in tankcars, 11½c. per pound in tank trucks, 12c. per pound in carlots, drums, and 14½c. per pound in less carlots.

The X grade, which has been moving chiefly into use in fire extinguishers, is a mixture of technical carbon tet and sufficient carbon bisulfide to depress the freezing point to minus 45.5°C or below, with the additional specification that the carbon bisulfide content of the product is not less than 0.75 percent nor more than 1 percent by weight.

December output of carbon tet, put by the Tariff Commission at 27,196,644 pounds, brought the aggregate for calendar year 1956 up to 305,319,113 pounds. The total for calendar year 1955 was 275,452,245 pounds. Output in November, 1956, amounted to 25,126,149 pounds.

Ethanol—Consumption of specially denatured alcohol as a solvent employed in production of cleaning, preserving and flavoring preparations amounted to 6,619,809 wine gallons of new material and 2,460 wine gallons of recovered material in the fiscal year ended June 30, 1956, the Alcohol and Tobacco Tax Division of Internal Revenue Service reported. The amount of alcohol recovered from these operations was 9,637 wine gallons.

For solvent use in production of pharmaceutical products for external use in the same fiscal year, consumption of new specially denatured alcohol was 3,631,291 wine gallons.

A breakdown of the foregoing statistics, with all figures representing number of wine gallons, follows:

	New Alcohol Used	*Recovered Alcohol Used*	*Recovered from Use*
PHARMACEUTICAL PRODUCTS FOR EXTERNAL USE			
Rubbing alcohol	2,199,827	....	....
USP and NF preparations:			
Witch hazel	115,419	....	....
Liniments	69,823	....	....
Collodions	7,634	....	....
Antiseptics	5,952	....	....
Miscellaneous	29,275	....	....
Sub-total	228,103	....	....
Tinctures of iodine[1]	34,060	....	....
Other preparations[2]	1,169,301	52	31
Total	3,631,291	52	31
CLEANING, PRESERVING AND FLAVORING PREPARATIONS			
Tobacco sprays and flavors	792,500	....	....
Cleaning preparations and operations[3]	4,937,169	2,460	1,722
Deodorant sprays[4]	120,638	....	....
Disinfectants, insecticides, etc	104,937	....	....
Sterilizing and preserving solutions	48,937	....	....
Embalming fluids[5]	16,670	....	....
Industrial soaps	23,435	....	7,915
Photoengraving and rotogravure use	88,944	....	....
Miscellaneous	486,579	....	....
Total	6,619,809	2,460	9,637

[1] Official and non-official.
[2] Other than USP and NF.
[3] Including home detergents.
[4] Other than body sprays.
[5] Including related products.

Total consumption of specially denatured alcohol during the 1955-56 fiscal year was 407,661,849 wine gallons, including 259,712,061 gallons of new alcohol and 147,949,788 gallons that was recycled. Alcohol recovered from these operations was 149,217,167 gallons.

Lactose—The once lively market for fermentation lactose for manufacture of penicillin was now feeble. Penicillin producers had for the most part switched to other culture media that were cheaper, though they yielded less penicillin than lactose.

Fermentation and other crudes were marketed last week at 8½c. per pound in lots of 23,000 pounds or more, 11½c. per pound in lots of 6,000 to 22,999 pounds, 11¾c. per pound in lots of 2,000 to 5,999 pounds and 12¼c. per pound in lots of

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Aliphatic Organics

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Though producers of USP and edible grades inaugurated a uniform policy of freight equalization a few months ago, fermentation and other crudes were still based on prices f.o.b., works.

Demand for USP lactose has been steady, while output has been increased markedly. The result was oversupply.

Imports of foreign milk sugar have been sharply curtailed in recent months. Evidently, the relatively low current prices for domestic material have made it competitively unatractive to foreign producers to market their material here at this time.

Methyl Chloride—A leading producer announced last week that he would increase his price effective April 1 by ¾c. per pound. The new quotation on a freight equalization basis will be 12¾c. per pound in single-unit tankcars, the only form in which this producer offers the material.

An inflammable gas, this material has been moving for use as a refrigerant and fumigant.

Methylene Chloride—The technical (otherwise refrigeration) grade will be advanced ¾c. per pound across the board effective April 1, a leading producer announced last week.

On a delivered basis, the new listings will be 12½c. per pound in tankcars, 13½c. per pound in tank trucks, 14c. per pound in carlots, drums, and 16¾c. per pound in less carlots.

Perchloroethylene—A major producer announced last week that prices on industrial and dry cleaning grade perchloroethylene will be advanced ¾c. per pound across the board effective April 1.

On a delivered basis, the new prices will be 12¼c. per pound in tankcars, 12¾c. per pound in tank trucks, 13½c. per pound in carlots, drums, and 15¼c. per pound in less carlots, drums.

Tariff Commission reported that production during December amounted to 15,963,820 pounds, bringing the aggregate for all of calendar year 1956 to 183,290,333 pounds. The total for calendar year 1955 was 176,997,831 pounds. Output in November, 1956, was 15,857,066 pounds.

1,1,1-Trichloroethane—A leading producer announced last week an advance in prices effective April 1 of ¾c. per pound across the board for 1,1,1-trichloroethane (otherwise methyl chloroform).

The new quotations, on a delivered basis, will be 13¾c. per pound in tankcars, 14¼c. per pound in tank trucks, 14¾c. per pound in carlots, drums, and 17¾c. per pound in less carlots, drums.

Trichloroethylene—A major producer announced last week a price advance effective April 1 ranging from 5 to 6 percent. This was a reflection of increased costs of labor, raw materials, containers and handling. The advance will amount to roughly ¾c. per pound.

Under the new schedule, prices will be, on a freight equalization basis, 12c. per pound in tanklots and 13c. per pound in carlots. Delivered price in the east on less carlots will be 15¼c. per pound.

Production in December was reported by the Tariff Commission to have been 25,254,934 pounds, bringing the total output for calendar year 1956 to 319,853,912 pounds. That for calendar year 1955 was 302,064,015 pounds. Production amounted to 26,626,121 pounds during last November.

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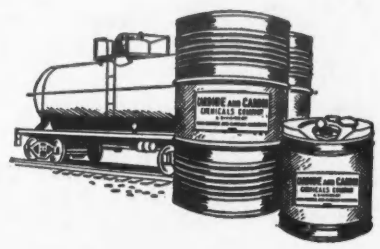

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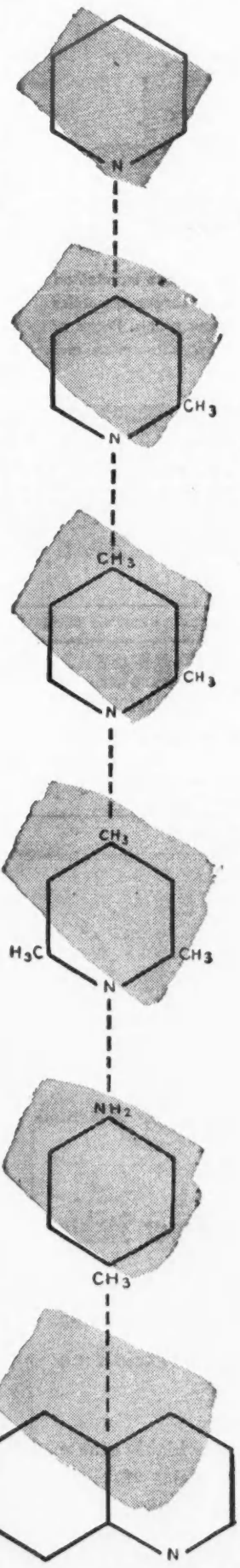

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Coal Chemicals

All major producers have reduced prices of aniline oil 1 cent per pound across the board effective immediately on both spot and contract business. Aniline salt and other aniline derivatives were not affected at this time. Trade sources noted that demand for aniline has picked up since the sharp decline noted last spring, though it was still short of that observed at this time a year ago. The market was now more stable than it had been, and producers forecasted a slight increase in total volume of sales in 1957 as compared to that of the year previous, without the sharp fluctuations in demand observed in 1956. The rubber industry was absorbing at least half of total aniline output in the current market, with dyes running a strong second as an outlet for this material. Other good markets were provided by use of aniline in manufacture of pigments, pharmaceuticals and explosives.

Additional producers joined the move initiated in the week previous to advance both technical and crude grades of salicylic acid 2 cents per pound across the board effective immediately on spot business and April 1 on contract.

Demand for low-boiling cresylic acid cuts with high phenol content was weaker, and meta-para acids were a bit easier. Otherwise, the acids were in fairly good balance. All of the more common cuts were in ample supply, however.

Bureau of Mines figures indicated that producers' stocks of crude naphthalene rose almost 40 million pounds during 1956.

Sales of cokeoven benzol during 1956 were almost equal to those of the year previous, despite the fact that the domestic market meantime absorbed more than 66 million gallons of imported benzol.

American Iron and Steel Institute estimated that steel production in the week ended March 10 would amount to 94.9 percent of theoretical capacity, equivalent to 2,429,000 tons of steel. For comparison, steel production was 2,456,000 tons in the week previous, 2,485,000 tons in the comparable week one month ago and 2,462,000 tons in the corresponding week a year ago.

Price Trends

Advanced
None.

Reduced
Aniline oil, 1c per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
118.32	*118.32	118.31	114.89

For Current Prices See Page 9

* Revised.

Basic Products

Benzol—Some trade sources, representing a substantial part of total domestic output of benzol, again reported that the market was appreciably easier. It was emphasized, however, that there was still a good reserve of strength and that the tone of the market remained firm.

While more than 66 million gallons of imported material was absorbed here in 1956, sales of domestic cokeoven material, excluding motor grade benzol, added up to 166,470,778 gallons, compared to 168,750,351 gallons sold in the year previous. Domestic producers' stocks of cokeoven benzol declined during 1956 from 7,997,768 gallons as of December 31, 1955, to 6,645,411 gallons as of December 31, 1956.

Sales of cokeoven benzol in 1956 included 80,283,068 gallons of 1° nitration material, 79,782,795 gallons of 2° industrial pure benzol, 1,780,179 gallons of 90 percent grade and 4,624,736 gallons of other industrial grades, excluding motor grade.

Cokeoven benzol sold in 1955 included 80,822,273 gallons of nitration grade, 85,585,518 gallons of industrial pure material, 1,667,385 gallons of 90 percent grade and 675,175 gallons of other industrial grades, except motor grade.

Producers' stocks of cokeoven benzol as of December 31, 1956, included 1,982,290 gallons of nitration grade, 3,745,055 gallons of industrial pure material, 73,100 gallons of 90 percent material and 844,966 gallons of other industrial grades, except motor grade.

As of December 31, 1955, producers' stocks of cokeoven benzol included 2,465,448 gallons of nitration material, 5,390,267 gallons of industrial pure grade, 67,830 gallons of 90 percent benzol and 74,223 gallons of other industrial grades, excluding motor grade.

Bureau of Mines has withheld data on motor grade benzol in order to avoid disclosure of individual company figures.

December imports of benzol fell off to 2,231,241 gallons valued at $609,144. This total was made up of 1,539,452 gallons valued at $441,531 from West Germany, docked at Galveston; 521,504 gallons valued at $125,161 from the Poland and Danzig area, brought in at New Orleans, and an additional 170,285 gallons valued at $42,452 from the Poland-Danzig area that was docked at Galveston.

Cresylic Acid — Low-boiling cuts with high phenol content were a bit weak, and meta-para was somewhat easier. With these exceptions, the more common cuts were in fairly good balance last week. All were available in ample supply.

Producers expected some strengthening of meta-para in the spring with anticipated increased consumption of this material for manufacture of tricresyl phosphate for use as a gasoline additive.

Naphthalene — Producers' stocks of crude cokeoven naphthalene swelled from 4,058,264 pounds as of December 31, 1955, the Census Bureau reported, to 33,825,635 pounds held as of December 31, 1956. Meantime, domestic sales declined from 173,788,784 pounds in 1955 to 138,164,739 pounds in 1956.

The breakdown shows that nearly all the instability was created in trade in material solidifying at 76° C and under 79° C. Sales of domestic cokeoven material of this grade amounted to only 97,046,189 pounds in 1956, as compared to 127,983,604 pounds sold in the year previous. Concurrently, producers' stocks of this grade bounded from 1,036,209 pounds to 30,319,544 pounds.

Crude naphthalene solidifying at 74° C

Cokeoven Output: December

Following are cokeoven production statistics comparing December, 1956, and the same month in 1955 as reported by the Bureau of Mines, with cumulative totals for calendar years 1955 and 1956 through December indicated. Only cokeoven output is represented. (Creosote content of creosote-coaltar solutions was not calculated prior to January, 1956.)

	December 1956	December 1955	Total Year 1956	Total Year 1955
Benzol (excluding motor grade)....gals.	17,767,486	16,620,000	178,659,679	174,220,341
Creosote oil:				
Creosote-coal tar solution.....gals.	1,020,907	289,600	4,459,511	4,861,419
Content in solution.....gals.	826,189	**	3,700,338	3,802,829
100 percent straight distillate.....gals.	2,807,359	2,297,300	24,344,851	26,157,675
Total 100 percent creosote.....gals.	3,633,548	**	28,045,189	29,960,504
Crude coaltar.....gals.	76,638,109	77,298,200	832,913,781	852,922,817
Naphthalene, crude:				
Solidifying under 74° C.....lbs.	3,791,583	3,849,200	37,073,094	38,199,282
At 74° C and under 76° C.....lbs.	1,384,473	1,184,800	16,337,756	17,888,009
At 76° C and under 79° C.....lbs.	12,328,388	10,236,200	126,393,382	128,135,747
Total .....lbs.	17,504,444	15,270,200	179,804,232	184,223,038
Solvent naphtha, refined.....gals.	19,004	25,800	200,922	302,316
Toluol .....gals.	3,487,373	3,345,500	37,163,656	38,205,443
Xylol .....gals.	860,542	930,900	10,355,889	11,294,085

** Not available.

Coal Chemicals

and under 76° C was sold in the amount of 8,126,342 pounds in 1955, as compared to 5,930,606 pounds in 1956, but producers' stocks of this grade meantime declined from 912,257 pounds to 886,376 pounds.

Sales of material solidifying under 74° C amounted to 37,678,838 pounds in 1955 and 35,187,944 pounds in 1956. Producers' stocks of this grade were 2,109,798 pounds as of December 31, 1955, and 2,619,715 pounds as of the same date one year later.

Solvent Naphtha—Sales of refined light solvent from domestic cokeovens were off substantially in 1956, amounting to 166,276 gallons, as compared with 204,065 gallons moved in 1955. At the same time, however, producers managed to trim their inventories from 76,620 gallons on hand as of December 31, 1955, to 56,273 gallons held on December 31, 1956.

Sales of crude heavy solvent increased from 5,176,292 gallons sold in 1955 to 5,502,086 gallons sold in 1956. Stocks of crude at producers' plants meantime rose from 252,677 gallons as of December 31, 1955, to 316,443 gallons held as of December 31, 1956.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending March 10 was as follows:

Ammonia liquor	lbs.	945,191
Ammonium sulfate	lbs.	40,246,855
Benzol	gals.	3,597,825
Coaltar	gals.	17,684,224
Creosote	gals.	686,026
Naphthalene, crude	lbs.	3,826,500
Pyridine (2°C.)	lbs.	13,721
Toluol	gals.	792,741
Xylol	gals.	228,675

Toluol—Demand remained strong last week, but it was by no means sufficient to remove the heavy output of cokeoven and petroleum plants. Inventories were awkwardly large.

Sales of toluol from domestic cokeoven plants amounted to 34,439,21 gallons in 1956, the Bureau of Mines reported, compared to sales of 36,651,693 gallons in the year previous.

Sales of 1° nitration toluol declined from 28,430,718 gallons in 1955 to 26,193,652 gallons in 1956, while sales of 2° industrial pure material from both tar refineries and synthetic chemical plants rose from 8,220,975 gallons in 1955 to 8,246,069 gallons in 1956.

Producers' stocks increased from 2,794,292 gallons held on December 31, 1955, to 3,587,401 gallons held as of December 31, 1956. Nitration material on hand rose from 2,408,435 gallons to 3,150,142 gallons during the year 1956, while industrial pure toluol stocks increased from 385,827 gallons to 437,259 gallons.

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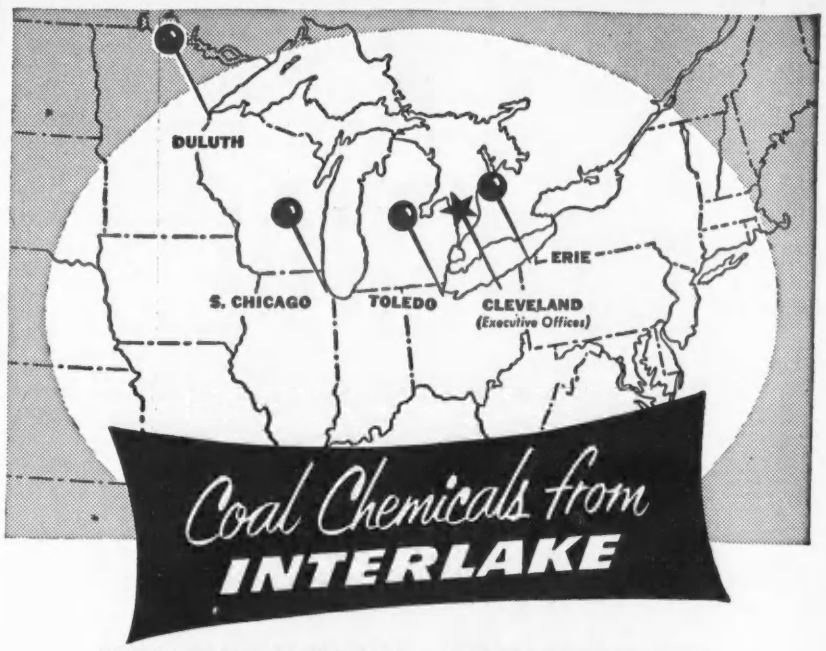

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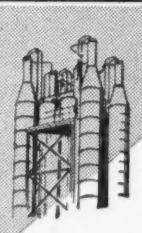

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Coal Chemicals

both contract and spot business. Aniline salt and other aniline derivatives were unchanged in price.

New quotations on aniline oil were 20c. per pound in tanklots and larger tankwagons, 20½c. per pound in 2,000-gallon tankwagon lots, 22c. per pound in carlots and 23c. per pound in less carlots, drums. All quotations were on a freight allowed basis.

Demand was not as strong as it was at this season a year ago, but trade sources reported that it had firmed up since the decline that appeared suddenly last spring. The market had apparently regained stability at a new level. The outlook for all of 1957, producers said, was for somewhat better volume of trade than the total handled in 1956, without the erratic changes of pace observed last year.

The rubber industry was consuming half or more of the material moved. Dyes were the second largest outlet in the current market. Good business was reported also in sales of aniline for use in manufacture of pigments, pharmaceuticals and explosives.

p-Phenetidine—The 5c. per pound price increase on this material announced in the previous issue became effective on contract March 1. It was erroneously stated at one point that the advance would not become effective on contract until April 1. The increased prices were currently effective for both contract and spot business.

The new schedule of prices, freight allowed basis, was $1.05 per pound on carlots and $1.08 per pound on less carlots.

Phthalic Anhydride—The trend observed since the first of the year continued last week. Demand was slightly firmer, but the improvement was only moderate. Business was slow in fourth quarter 1956, and there was still a way to go before consumption and output would be in good balance. Underlying market factors were regarded as sound, and trade sources were confident of further improvement in the coming weeks. Supply was ample. Prices were steady and unchanged.

Salicylic Acid—Additional producers advanced prices of crude and technical material 2c. per pound across the board effective immediately on spot business and April 1 on contract. The move was identical to that taken by one of the leading producers in the week previous.

The new schedule, with all prices on a delivered basis, quotes crude at 37c. per pound in carlots and 38c. per pound in less carlots, technical acid at 39c. per pound in carlots, 43c. per pound in smaller drumlots and 53c. per pound in less drumlots.

Bids Wanted

Alcohol, 2,800 5-gal. dms., ethyl alcohol, USP, 29,352 bots. absolute alcohol, 13,000 cans isopropyl alcohol, inv. 43, Mar. 12, Military Med. Supply Agency, 84 Sands St., Contracting Office, Bklyn., N. Y.

Disinfectant, 25,748 gals. germicidal and fungicidal, inv. 1702, Mar. 21, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Drugs, 25 grams 9-alpha fluoro prednisolone, 40 grams, 9-alpha 2-alpha methyl cortisol, inv. 473, Mar. 13, Health, Education & Welfare, Public Health Service, Ntl. Institute of Health, Rockville Pike, Bethesda 14, Md.

Gas, chlorine and carbon dioxide liquid, as required during the period July 1 through Dec. 31, inv. 633, Mar. 12, Navy Purchasing Office, 1206 S. Santee St. Los Angeles 15, Calif.

Iodine, 13,000 1-oz. bots., inv. 388, Mar. 14, Chief of Procurement, Post Office Dept., Washington, D. C.

Lime, water treatment, as required during the period July 1, 1957 through Mar. 31, 1958, inv. 625, Mar. 12, Navy Purchasing Office, 1206 S. Santee St., Los Angeles 15, Calif.

Mercury, 285 6-lb. polyethylene bots., inv. 1955-58, Mar. 25, Signal Supply Agency, 225 S. 18th St., Phila. 3, Pa.

Nitric acid, 5,180 lbs., inv. 24282, Mar. 18, Govern. Printing Office, Purchasing Agent, Washington, D. C.

Paint, 320 gals. oil paint 150 gals. oil enamel, 300 gals. oil stain, 150 gals. standard commercial grade exterior paint, inv. 228, Mar. 19, Contracting Officer, West Point Military Academy, West Point, N. Y.; 91,575 gals. aircraft enamel, inv. 1693, Mar. 21, 12,130 gals. interior paint, small business only, inv. 1636, Mar. 18, 1,156 gals. interior deck paint, inv. (4)-1629, Mar. 13, 10,918 gals. alkyd primer paint, inv. 1646, Mar. 14, Gen. Stores Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

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Drugs, Fine Chemicals

Phenothiazine was advanced 4 cents per pound in the only price change noted in drug and fine chemicals markets last week. The advances on salicylates two weeks ago were fully maintained throughout the trade with announcement on Monday that the remaining major producer would go along with the advances. This had been a foregone conclusion, trade observers noted. Lanolin continued to move in good business volume in a highly competitive market. Pharmaceutical needs were said to outweigh cosmetic uses at present, although trade sources pointed out lanolin demand patterns have changed radically in recent years, especially where cosmetic lanolin is required. Bismuth metal was said to have been active for use in atomic reactions and continued good use of low melting bismuth alloys in plane struts was noted. Subcarbonate and subnitrate salts were moving well for pharmaceutical uses. The recent advance of heparin from $2.50 to $4.50 was the result of shortages of raw materials. Beef lung has been used in increasing amounts by manufacturers of dog foods which accounted for the shortage of material available for heparin production. The use of the synthetic, dicoumerol, has limited advantages, it was said, since its toxic limits in the human system are soon reached. The use of conjugated estrogens in the hormone field was said to be on the increase. Ascorbic acid imports were said to have picked up in recent weeks, but trade sources were unable to confirm the rumor. An import dealer reported having received material within the week which was to be used for orders originally slated to be filled in September. Production difficulties at source together with uncertain shipping schedules accounted for delays it was said. After declines posted two weeks ago on salicylamide, price was pegged at $1.15 per pound. There were continued reports in the trade of shading on this price to $1.05 on quantities of 5,000 pounds and more. Iodides continued in a relatively weak position pricewise. Informants pointed to recent declines in the price of potassium iodate and speculated that it might find use in the highly competitive feed supplement industry.

Price Trends

Advanced
Phenothiazine, NF, 4c. per lb.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
65.30	65.30	65.27	65.84

For Current Prices see Page 9

Acid Ascorbic—There was some indication that ascorbic acid imports may have taken an upswing in the past month or so. However, domestic producers reports failed to substantiate the rumor. An import dealer revealed that material was currently being received to fill orders taken late last summer and originally scheduled for fall delivery. Isoascorbic acid was receiving good trade notice. This item is said to be especially attractive to consumers whose primary interest is in antioxident properties rather than vitamin C content.

Acid PAS—The use of acid and sodium salt continued at a steady pace. Studies have shown PAS to be particularly effective in combination with other drugs due to its ability to resist emergent strains which may develop in the use of streptomycin, isoniazid or other tuberculosis drugs alone. A recent report lists streptovaracin as a possible valuable adjunct in tuberculosis therapy. It is reportedly ten times as active as streptomycin in laboratory animal tests. Unsettled trade condition in PAS have given domestic producers much cause for concern in the past year.

Amphetamines—Suppliers reported conditions in this market unchanged from last reports. d-Forms are priced at $28 per pound, $18 on contract, and there were some reports in the trade of shading to a $16.50 level. Since 90,000 tablets may be processed from a single pound of amphetamine, trade sources pointed out, there is little enough profit at the $18 level. Stocks were entirely adequate and spot demands continue steady. dl-Amphetamines are priced at $6 and contract sales range to $4.50 per pound.

Bismuth Salts—The market was quiet, although good demand has been reported for subcarbonate and subnitrate for pharmaceutical uses. Bismuth metal has been active in recent months for use in atomic reactions. Low melting bismuth alloys continue in use in the production of airplane struts to prevent "crimp" while metal is being bent, it was said.

Calcium Phytate—Needs were said to be routine and prices were unchanged from last reports. A recent report shows that phytic acid, found in certain cereals and brown bread has been proven safe and effective in treating vitamin D poisoning, sarcoid and some kidney-stone conditions in which calcium use and excretion are defective. It was said that the drug appears to be without side effects except for a case of mild and termporary diarrhea.

Camphene—Material in tankcars was priced at 12½c. per pound while carloads were 15c. and less than carloads 16½c. Less than drum quantities were available from a major producer priced at 24½c. per pound. This price schedule has been in effect since January, 1955. Trade sources reported good demands for camphene for use as a raw material in the production of anethole and isoborneol. Demands continued steady from makers of synthetic camphor, it was said.

Cinchona Derivatives—Market conditions have been generally unchanged pricewise for many months. Census bureau reports show that 588,100 pounds of quinine sulfate were imported during December, 1956. Quinidine sulfate was said to be in good demand.

Hormones—Prices on the principal hormones were unchanged last week. Testosterone in suspension and testosterone propionate in oil were in good demand due to physicians' preference for the more potent injectible materials. Methyl testosterone, used orally in tablet form, was in lesser demand than the aforementioned substances. Diethylstilbestrol continued in good use in the poultry industry for caponizing hens. Trade sources pointed out that the recent increase in heparin prices from $2.50 to $4.50 was the result of shortages in raw materials. Beef lung has been used in increasing amounts by dog food manufacturers and the result has been a shortage of material for production of heparin. The use of the synthetic dicoumarol, has limited advantages, it was said, since its toxic limits in the human system are soon reached. Conjugated estrogens were said to be in increased use in recent months. Pregnenolone for use as an intermediate in the production of progesterone was in good demand. Supplies of all the major hormones were quite adequate and trade sources reported facilities well able to handle large volume orders for shipment without delay.

Penicillin—Prices were unchanged since the advances recorded in January. Demands continued good with supplies continuing to be somewhat limited as they have been in the past few months. Recent reports indicate that penicillin may act by halting the formation of the hard protective wall found around bacterial cells. Inference, if the theory is correct, would be that new drugs may be developed which would stop bacteria from ever growing up enough to be dangerous.

Iodides—Conditions in this market were essentially unchanged. Major producers continued to list potassium iodide at $1.90 per pound. A recent report indicated that a switch from iodide to iodate might take place in the feed supplement industry since the iodate has been found to be of good use in this area. Potassium iodate prices were reduced in January to a level of $1.57 per pound from a price of $1.90. Producers continued to report iodides in a weak position, pricewise.

Lanolin—A substantial part of total lanolin production was said to be going to consumers in the pharmaceutical industry. Material for cosmetic use was also in good demand. Trade sources pointed out that it has become increasingly difficult to anticipate consumer needs for lanolin to be used in cosmetics since buy-

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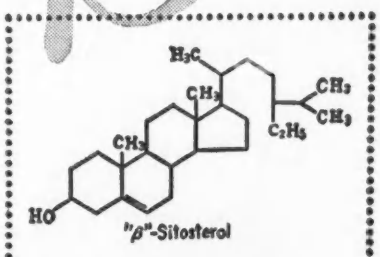

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Drugs, Fine Chemicals

ing habits have changed to the extent that they are now closely geared to million dollar advertising campaigns via newspapers, radio and, in particular, television. It was observed that a seasonal demand pattern involving lanolin no longer has the significance it once might have had. Generally speaking, however, it was agreed that the summer months from June to September remain the slow season for this material. Major producers quoted a range of prices unchanged from last reports. As in other segments of the chemical industry, rising costs were said to be causing a profit squeeze. Producers did not indicate that a price change was imminent at the present time, in this highly competitive market.

Mercurials—The market was quiet as it has been for many months. Supplies were adequate and needs were steady with sales volume said to be at a seasonally normal level. Prices of long standing in the trade were unchanged according to reports from reliable sources. Mercury metal has been unchanged for several weeks.

Oxyquinolin—Price was quoted at $4.75 per pound in 100 pound lots. There have been no changes noted in this market for many months. Domestic production was said to have suffered in recent years due to an influx of cheaper import material. Supplies were quite ample to care for the needs of the trade. Demands were steady and reports from observers indicated that no price change was being contemplated at this time.

Phenothiazine—Producers announced a 4c. per pound across the board increase on NF material last week. New price schedules call for the carload price to be 43c. per pound while 2,100 pounds and over was priced at 45c. and less than 2,100 pounds was 47c. Good demands were reported by producers from consumers of this material as used in animal feed supplements. Phenothiazine has been used in cattle feed in recent years as an anthelmintic agent.

Salicylates—Major producers reported heavy demands for aspirin and a number of salicylates which were the subject of price advances reported two weeks ago. Those advances were fully maintained throughout the trade. Observers indicated that the heavy influx of orders for such

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basic items as aspirin, acetophenetidin and salicylic acid would probably be handled without too much difficulty. Changes on these items were effective immediately on spot and April 1 on contract. After the 10c. per pound decline on salicylamide two weeks ago, prices were quoted at $1.15. There were reports of shading to a level of $1.05 on large quantities.

Sulfas—Supplies were generally speaking entirely adequate. There were scattered reports of shortages, especially for sulfathiazole, but producers said that the situation was a temporary one. Demands continued to be good and there was no indication of a change at this time according to trade sources queried.

Theophylline—The market was quiet. Domestic producers continued to list this item at prices which have been reported previously. Anhydrous or USP material in 100 pound drum quantities was quoted at $3.65 per pound. Unsettled trade conditions in this market have been cause for concern to domestic producers. Supplies were quite ample to care for the modest demands being made at the present time.

Zinc Undecylenate — Pharmaceutical needs for this item were steady with sales at routine levels. Zinc undecylenate continues to find good use in medicinal preparations for treating athlete's foot. Supplies were adequate. Material was available from major producers priced at $2 per pound.

Botanicals

Dealers continued to report a freshening of interest from consumers for new crop material in large volume domestic botanical markets. In many cases, material on hand was being used without replacement and prices remained at the high levels which have been attained since the scanty harvest seasons of last year. It was said that collectors would probably face the same major problem this year as they have in the past; that is, high costs of labor and shortages of labor at any price. Reports from trade sources indicated that papain has shown a sharp advance in price since the recent development of shipping problems which evolved out of lack of shipping space and increased ocean freight rates after the closing of the canal. Trading in lavender flowers and chamomile flowers was said to be routine and dealers quoted prices which have been established in the trade for several weeks. Observers indicated that moderate trade interest is being shown in the spring crop of Buchu leaves. Price on the latter item was unchanged from last reports.

Buchu Leaves—Dealers were preparing for new crop contracts. Supplies are adequate with demands said to be steady and sales at a moderate volume. Current price is $1.30 per pound. Observers in the trade indicated that conditions in this market were substantially unchanged from last reports.

Chamomile Flowers—The market was quiet. Hungarian was reported ranging in price from 85c. to 95c. per pound while Roman was $3. Stocks were adequate to care for the needs of the trade. Sales were characterized as being steady at a low volume. No changes in this market were anticipated by dealers in the trade.

Grindelia Robusta — Supplies were ample according to trade sources queried. Material was said to be moving into consumer channels at a steady pace. Dealers reported price on this item at 45c. per pound. No changes were anticipated, it was said.

Lavender Flowers—Consumer interest was said to be seasonally normal. Supplies were adequate and prices unchanged from last reports. Ordinary ranged in price from 25c. to 40c. per pound while medium was 75c. to 80c. Lavender flowers, select, ranged from 95c to $1 per pound. Conditions in this market are essentially unchanged from last reports.

Papain — Dealers reported shipping problems have developed on this item resulting in higher prices. African was priced at $5 per pound while Ceylon material was $4.50. Supplies were ample and inquiry at a normal level, it was said.

US Contributes $1.5 Million Toward Malaria Eradication

A check for $1.5 million was presented to the Pan-American Sanitary Bureau last week as a contribution from the United States government toward eradication of malaria in Latin-American countries.

The presentation was made by Dr. Milton S. Eisenhower, President Eisenhower's representative on the Inter-American Committe of Presidential Representatives, at ceremonies in the office of Dr. Jose A. Mora, secretary-general of the Organization of American States.

Grace Names Dr. Mitchell To Head Research Group

The research and development division of W. R. Grace & Co., New York, has named Dr. Fern Wood Mitchell as manager of the research services group.

Dr. Mitchell joined the Grace organization in 1955. From 1953 to 1955 he was chief analytical chemist at American Cyanamid Company's Fortier Plant, New Orleans, La. Earlier, he was a research chemist for General Aniline & Film Corporation at Easton, Pa.

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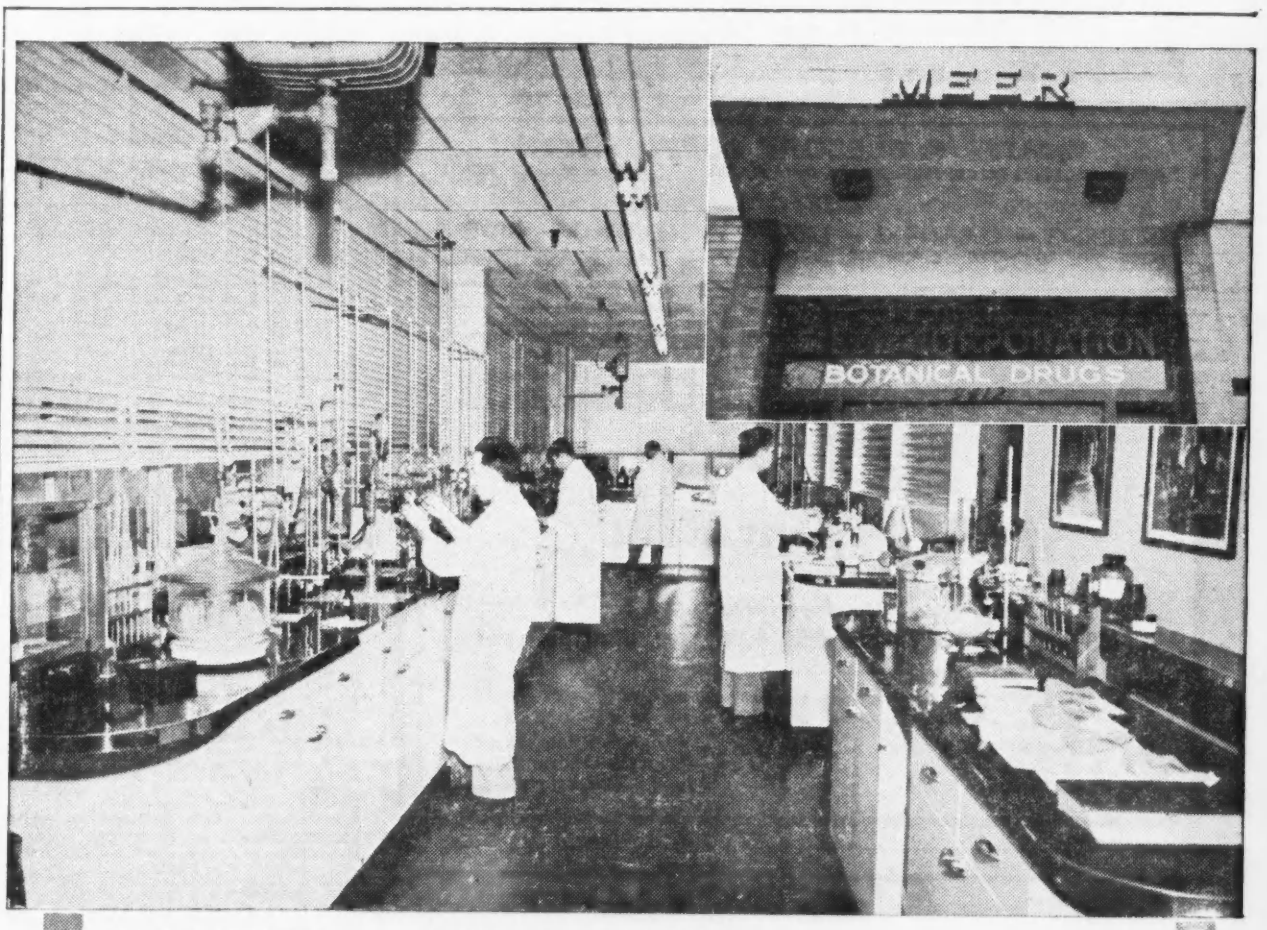

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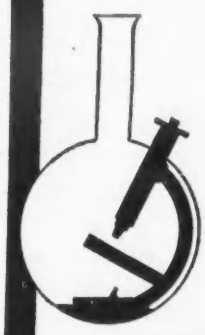

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ALUM—500 bgs, C M C Chemicals Inc, Liverpool
AMMONIUM BICARBONATE—100 dms, Chemical Manufacturing Co, Hull
AMYRIS OIL—9 dms, Ungerer & Co, Port Au Prince
15 dms, Port Au Prince
ANILINE DYES—21 dms, Carbic Color & Chemical Co, Rotterdam
2 dms, E I DuPont de Nemours & Co, Havre
2 dms, Francolor Inc, Havre
8 dms, L & R Organic Products Co, Rotterdam
84 dms, Hensel Bruckmann & Lorbacher, Hamburg
7 dms, C A Haynes, Hamburg
52 dms, Hamburg
ANISE SEED—200 bgs, Alicante
ANNATTO SEED—248 bgs, D Steengrafe & Co, Kingston
1,317 bgs, C Hansens Lab, Kingston
107 bgs, Rohner Gehrig, Kingston
364 bgs, Guayaquil
ANTIMONY REGULUS—95 cs, Cosmos Shipping Co, Trieste
513 cs, Sibenik
200 cs, Antwerp
ANTIPYRENE—20 dms, Bremen
ARABIC GUM—100 bgs, Murwal Inc, Port Sudan
100 bgs, Colony Import & Export Corp, Port Sudan
395 bgs, Meer Corp, Port Sudan
400 bgs, T M Duche & Sons, Port Sudan
100 bgs, Manufacturers Trust Co, Port Sudan
611 bgs, John Holt & Co, Port Sudan
150 bgs, P A Dunkel, Port Sudan
200 bgs, Port Sudan
1,000 bgs, Bank of N Y, Port Sudan
175 bgs, National City Bank, Port Sudan
300 bgs, Bankers Trust Co, Port Sudan
750 bgs, Thurston & Braidich, Port Sudan
250 bgs, H Heide Inc, Port Sudan
150 bgs, Max Van Pels, Port Sudan
650 bgs, Port Sudan
ARGOL—500 bgs, Buenos Aires
ARSENIC TRI-IODIDE—1 cs, Chemimpex Inc, Bremen
ASBESTOS FIBER—400 bgs, Bankers Trust Co, Lourenco Marques
BALL CLAY—100 tons, Avonmouth
BARBASCO ROOT—145 bls, Kane Import Corp, Callao
162 bgs, Kane Import Corp, Callao
BARIUM CARBONATE—2,000 bgs, Rotterdam
SULFATE—150 cs, Picker X-Ray Corp, London
9 dms, Conray Products Co, London
THIOCYANIDE—1 bbl, Chemimpex Inc, Bremen
BEEF EXTRACT—450 cs, Armour & Co, Buenos Aires
BEESWAX—22 bgs, H H Pike & Co, Tampico
17 bgs, Machado & Co, Puerto Plata
61 bgs, Machado & Co, Ciudad Trujillo
50 bgs, Porcella Uicini & Co, Ciudad Trujillo
23 bgs, John Holt & Co, Port Au Prince
167 bgs, Hans Tobeason, Lisbon
68 bgs, International Commodities Corp, Valparaiso
41 bgs, Lenape Trading Co, Santiago
120 bgs, Dura Commodities Corp, Rio de Janeiro
36 bgs, Duncan Fox & Co, Talcahuano
131 bgs, Santiago
38 bgs, Tampico
52 bgs, Puerto Plata
30 bgs, Ciudad Trujillo
BENZOIN GUM—42 bdls, S B Penick & Co, Singapore
BERBERIS ROOT—67 bgs, Rijeka
BISMUTH—34 cs, Cerro de Pasco Corp, Callao
BLANC FIXE—330 bgs, Rotterdam
BLEACHING POWDER—100 dms, Chemical Manufacturing Co, Liverpool
BLOOD, DRIED—1,019 bgs, H J Baker & Bro, Christobal
BONE CHAR—505 bgs, Lisbon
CALCIUM PHOSPHATE, DIBASIC—1,200 bgs, Wessel Duval & Co, Antwerp
CAMPHOR—100 cs, Biddle Sawyer Corp, Keelung
20 cs, European Chemical Co, Keelung
110 cs, Dieterle & Victory, Keelung
50 cs, Max Van Pels, Keelung
SYNTHETIC—134 cs, P H Petry, London
OIL—10 dms, D W Hutchinson & Co, Yokohama
CARAWAY SEED—150 bgs, I Grob & Co, Rotterdam
100 bgs, R J Spitz, Rotterdam
100 bgs, Biddle Purchasing Co, Rotterdam
100 bgs, P H Petry, Rotterdam
OIL—3 dms, Fritzsche Bros, Rotterdam
CARDAMOM SEED—75 cs, Wm E Martin & Sons, Puerto Barrios
12 cs, Karl H Landes & E Balint, Puerto Barrios
CAROB—149 bgs, Prentiss Drug & Chemical Co, Piraeus
CASEIN—1,000 bgs, Irving Trust Co, Buenos Aires
2,000 bgs, Chemical Bank, Buenos Aires
1,900 bgs, Tupman Thurlow, Buenos Aires
645 bgs, F H Paul & Stein Bros, Oslo
1,000 bgs, Eugenio Lang, Buenos Aires
2,000 bgs, L N White & Co, Buenos Aires
1,240 bgs, Buenos Aires
CASSIA—77 bls, P H Petry, Rotterdam
918 bls, Rotterdam
CASTOR OIL—872 tons, Baker Castor Oil Co, Bombay
205 tons, Smith Weihman Co, Lobito
98 tons, Jorge Degen & Co, Buenos Aires
540 tons, Recife
CHESTNUT EXTRACT—1,000 bgs, Barkey Importing Co, Genoa
CHLORAL HYDRATE—10 kgs, Ferro Metal & Chemical Corp, London
60 kgs, Gallard Schlesinger, Liverpool
CHLORINATED RUBBER—500 bgs, C M C Chemicals Inc, Liverpool
CHLOROPHYLL—3 cs, Chas L Huisking & Co, Southampton
24 dms, Airkem Inc, London
CHOLIC ACID—16 dms, Bankers Trust Co, Buenos Aires
CITRONELLA OIL—25 dms, Norda Essential Oil & Chemical Co, Keelung
135 dms, United Global Corp, Keelung
25 dms, A Verley & Co, Keelung
45 dms, Lo Curto & Funk, Keelung
25 dms, Van Ameringen Haebler, Keelung
25 dms, Internatio Rotterdam, Keelung
20 dms, Consumers Import Co, Keelung
10 dms, Keelung
CLOVE—200 bgs, A G Dunn, Tamatave
100 bgs, Otto Gerdau, Tamatave
400 bgs, George Lueders & Co, Tamatave
200 bgs, Ludwig Mueller, Tamatave
CLOVELEAF OIL—23 dms, Fritzsche Bros, Tamatave
24 dms, Shulton Inc, Tamatave
73 dms, Magnus Mabee & Reynard, Tamatave
25 dms, Givaudan Corp, Tamatave
25 dms, Lo Curto & Funk, Tamatave
9 dms, Ufinindo International Corp, Tamatave
COALTAR ACID—7 dms, J M Rogers Co, Liverpool
CREOSOTE—42 dms, J M Rogers & Co, Liverpool
DYES—13 dms, Hensel Bruckmann & Lorbacher, Bremen
18 dms, Nova Chemical Corp, Rottendam
5 dms, Hensel Bruckmann & Lorbacher, Rotterdam
COCHINEAL—20 bgs, Callao
COCONUT OIL—630 tons, American Trust Co, Manila
792 tons, American Trust Co, Zamboanga
2,635 tons, Manila
COD OIL—100 dms, Reilly Whittman Walton Co, St Johns
100 dms, Ottol Oil Co, St Johns
235 dms, National City Bank, Lisbon
25 dms, Arista Oil Products Co, Aalesund
CODLIVER OIL—150 dms, Scandinavian Oil Co, Bergen
300 dms, Peder Devold Oil Co, Bergen
66 dms, Silmo Chemical Corp, Halifax
1,657 dms, National City Bank, Lisbon
35 dms, Arista Oil Products Co, Aalesund
CORIANDER SEED—500 bgs, M J Golombeck, Casablanca
500 bgs, Karl H Landes & E Balint, Casablanca
CORN STARCH—220 bgs, Rotterdam
CRESYLIC ACID—652 dms, H A Gogarty, Avonmouth
50 dms, M W Hardy & Co, London
26 tons, H A Gogarty, Liverpool
707 dms, H A Gogarty, Liverpool
CUBE ROOT—425 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—456 bgs, Tana Trading Corp, Khorramshahr
285 bgs, C M Van Sillevoldt, Khorramshahr
239 bgs, Khorramshahr
CUTTLEFISH BONE—183 cs, Lisbon
100 cs, Havre
50 cs, Takoradi
DAMMAR GUM—7 kgs, O G Innes Corp, London
10 bgs, O G Innes Corp, London
30 cs, Archer Daniels Midland Co, Bangkok
DEXTRIN—991 bgs, Stein Hall & Co, Rotterdam
545 bgs, Chase Manhattan Bank, Rotterdam
DICHLORODIFLUOROMETHANE—15 dms, E I Dupont De Nemours & Co, Copenhagen
DIVI DIVI—449 Seroons, Curacao Trading Co, Puerto Plata
DOGWOOD BARK—70 bls, Lydia E Pinkham, Kingston
EPHEDRINE SULFATE—1 cs, Havre
EQUESTI HERB—30 bls, Meer Corp, Rijeka
EUCALYPTUS OIL—5 dms, Lo Curto & Funk, Kobe
1 dm, Colgate Palmolive Co, Santos
FARINA STARCH—896 bgs, Spence Sales Co, London
FENNEL SEED—77 bgs, Meer Corp, Bombay
FERRIC SULFATE—151 dms, Hudson Shipping Co, Liverpool
FERRIC-AMMONIUM SULFATE—32 dms, London
FISH SCALE EXTRACT—25 cans, Mearl Corp, Rotterdam
FISHLIVER OIL—10 dms, Bank of California, Yokohama
5 dms, Albumina Supply Co, Yokohama
20 dms, R S Reade, Yokohama
9 bbls, Mitsubishi International Corp, Beirut
10 dms, Mitsubishi International Corp, Yokohama
FORMIC ACID—100 dms, I M Sobin Co, Rotterdam
FUEL OIL—116,757 bbls, Paragon Oil Co, Punta Cardon
224,767 bbls, Metropolitan Petroleum Corp, Curacao
70,000 bbls, Esso Export Corp, Aruba
79,174 bbls, Hess Inc, Curacao
701,400 bbls, Esso Standard Oil Co, Aruba
91,366 bbls, Shell Oil Co, Curacao
163,884 bbls, Paragon Oil Co, Tampico
91,856 bbls, Royal Petroleum Corp, San Lorenzo
160,750 bbls, Esso Standard Oil Co, Las Piedras
58,263 bbls, Royal Petroleum Corp, Curacao
FURFURAL—859 tons, E I Dupont De Nemours & Co, La Romana
GELATIN—100 dms, P Leiner & Sons, London
323 bgs, B Young & Co, London
668 bgs, Transatlantic Animal By Products Corp, Rotterdam
198 bbls, Coignet Chemical Co, Antwerp
200 bgs, M Corbett & Co, Marseille
20 dms, P Leiner & Sons, Avonmouth
200 bgs, Hensel Bruckmann & Lorbacher, Rotterdam
100 bgs, T M Duche & Sons, Havre
200 bbls, Antwerp
GERANIUM OIL—2 dms, Antoine Chiris Co, Tamatave
5 dms, Ungerer & Co, Tamatave
9 dms, J Manheimer, Tamatave
1 dm, Felton Chemical Co, Tamatave
11 dms, Ufinindo International Corp, Durban
GINGER—84 bgs, Shippers Produce Corp, Kingston
30 bgs, Kellys America Ltd, Kingston
40 bgs, Meer Corp, Kingston
24 bgs, Otto Gerdau, Kingston
30 bgs, Van Loan & Co, Kingston
30 bgs, Karl H Landes & E Balint, Kingston
144 bgs, Wm M Allison & Co, Lagos
95 bgs, Freetown
GLUE—1,010 bgs, Jung Forwarding Co, Liverpool
40 cs, M Corbett & Co, Marseille
20 dms, M Corbett & Co, Marseille
GOUDAMIDE—1 bg, Aceto Chemical Co, Rotterdam
GRAPHITE—1,022 bgs, Asbury Graphite Mills, Tamatave
1,000 bgs, Joseph Dixon Crucible Co, Tamatave
2,000 bgs, C Pettinos, Tamatave
1,250 bgs, C Pettinos, Hong Kong
1,500 bgs, Asbury Graphite Mills, Hong Kong
GUANIDINE NITRATE—114 dms, Terra Chemicals Inc, Bremen
GYPSUM, CRUDE—10,099 tons, U S Gypsum Co, Hantsport
HENNA LEAVES—33 bls, Meer Corp, Bombay
HYDROGEN PEROXIDE—36 dms, Terra Chemicals Inc, Hamburg
IODINE, CRUDE—462 kgs, Chilean Nitrate Sales Corp, Tocopilla
IPECAC ROOT—4 bgs, Curacao Trading Co, Port Limon

IRON BLUE—16 dms, Van Oppen & Co, Liverpool
PEPTONATE—4 dms, Hudson Shipping Co, Liverpool
JUNIPER BERRIES—415 bgs, S B Penick & Co, Rijeka
KAMALA POWDER—26 bgs, Prentiss Drug & Chemical Co, Bombay
KARAYA GUM—134 bgs, S B Penick & Co, Bombay
134 bgs, Meer Corp, Bombay
123 bgs, Morningstar Nicol, Bombay
KOLA NUTS—188 bgs, D Steengrafe & Co, Kingston
LACTOSE—100 bgs, Chas L Huisking & Co, Liverpool
LAUREL LEAVES—20 bls, Max Van Pels, Lisbon
LAURIC ACID—540 bgs, Procter & Gamble Co, Copenhagen
60 bgs, Aceto Chemical Co, Rotterdam
LAVANDIN OIL—5 dms, Dodge & Olcott, Marseille
5 dms, Ungerer & Co, Marseille
LEMON OIL—10 hf cs, Messina

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1 dm, Norda Essential Oil & Chemical Co, Port Au Prince
LIVERMEAL—669 bgs, Ovimpex Inc, Buenos Aires
1,492 bgs, Wessel Duval & Co, Buenos Aires
LOGWOOD EXTRACT—291 cks, American Dyewood Co, Kingston
MACE—42 cs, W Phyfe, Rotterdam
MAGNESIUM CARBONATE—200 bgs, Reheis Co, Liverpool
OXIDE—10 cs, Armco Steel Corp, Liverpool
SILICOFLUORIDE—46 cks, European Chemical Co, Hamburg
MANDARIN OIL—8 hf cs, Messina
MANGROVE BARK—1,258 bgs, Olson Importing Co, Lourenco Marques
3,325 bgs, American Extract Co, Tumaco
MARJORAM LEAVES—65 bls, Louis Furth, Marseille
105 bls, M J Golombeck, Marseille
147 bgs, Callao
MELLISAE LEAVES—3 bls, S B Penick & Co, Rijeka
MENTHOL—250 cs, Schwabach & Co, Santos
MERCURIC AMMONIUM CHLORIDE—2 cs, Gallard Schlesinger, Southampton
MERCURY—50 flks, Intermaritime Forwarding Co, Vera Cruz
400 flks, Hanover Bank, Leghorn
METHYL METHACRYLATE MONOMER—18 dms, Hercules Powder Co, Rotterdam
PENTADIENE—1 cs, K & K Lab, London
MOLASSES—350 tons, W R Grace & Co, Salaverry
MONOCHLOROACETIC ACID—600 dms, International Selling Corp, Marseille
MUSK, ARTIFICIAL—6 dms, Roure-Dupont Inc, Rotterdam
XYLENE—19 kgs, Compagnie Parento Inc, London
MYROBALANS—800 bgs, Barkey Importing Co, Bombay
2,286 bgs, Hammond & Carpenter, Bombay
MYRTLE LEAVES—20 bls, Meer Corp, Lisbon
NAPHTHALENE—333 bgs, Avonmouth
NIGER SEED—59 bgs, B Rosenberg, Massawa
148 bgs, Joel Bieler, Massawa
100 bgs, Massawa
NUTMEG—22 bgs, J D Smith Interocean, London
28 bgs, R J Spitz, Rotterdam
193 bgs, Rotterdam
OLIVE OIL—108 dms, R V Delaphenha & Co, Haifa
54 dms, Venice Importing Co, Haifa
25 dms, Atlantic Bank of N Y, Haifa
100 dms, M Samos Import & Export Corp, Sfax
25 dms, Lamana Azema & Farman, Sfax
100 dms, Uddo & Taormina, Sfax
65 dms, Toronto Bank, Sfax
25 dms, D & A Sciafani, Sfax
50 dms, A Fantis, Sfax
25 dms, Rionelli Packing Co, Sfax
25 dms, Castello Packing Co, Sfax
25 dms, A M S Packing Co, Sfax
100 dms, M M DeRosa, Sfax
300 dms, Bankers Trust Co, Sfax
250 dms, J Ossola Co, Sfax
50 dms, A N Cory, Sfax
125 dms, Mawer Gulden Annis, Sfax
25 dms, Aroma Food Corp, Sfax
25 dms, D Simone, Sfax
200 dms, Atlantic Bank of N Y, Sfax
100 dms, Smith Weihman Co, Sfax
55 dms, National City Bank, Sfax
50 dms, C Orlando Co, Sfax
500 dms, Gem Packing Corp, Sfax
50 dms, Ellyda Imports, Sfax
100 dms, J Victori & Co, Sfax
50 dms, Chicago Macaroni Co, Casablanca
50 dms, Leghorn Trading Co, Casablanca
200 dms, Atlantic Bank of N Y, Casablanca
25 dms, Castello Packing Co, Casablanca
25 dms, Caruso Products, Casablanca
27 dms, N Lekas Corp, Haifa
27 dms, Aroma Food Corp, Haifa
ORANGE OIL—4 dms, Citrus & Allied Essential Oil Co, Puerto Plata
10 cs, Lo Curto & Funk, Kingston
OX BILE EXTRACT—4 dms, Lang & Marshall, Copenhagen
PALM OIL—886 tons, Matadi
PAPRIKA—600 bgs, R F Downing & Co, Alicante
100 bgs, Gallagher & Ascher, Alicante
130 bgs, H Schlicting, Alicante
355 bgs, J Weinstein, Alicante
300 bgs, A A Sayia, Alicante
1,125 bgs, Alicante
800 bgs, National City Bank, Rijeka
800 bgs, Wm E Martin & Sons, Trieste
340 bgs, Rijeka
PARSELEY SEED—7 bgs, Vaughans Seed Co, London
PATCHOULI OIL—10 dms, A Verley & Co, Singapore
3 dms, Centflor Manufacturing Co, Singapore
5 dms, Felton Chemical Co, Penang
9 dms, Dodge & Olcott, Penang
PECTIN—100 kgs, T M Duche & Sons, Copenhagen
PEPPER, RED—80 bgs, Becker Mayer Seed Co, Kingston
80 bgs, M J Golombeck, Kingston
160 bgs, Otto Gerdau, Kingston
120 bgs, A G Dunn, Kingston
80 bgs, Kellys America Ltd, Kingston
100 bgs, Wm E Martin Sons, Kobe
200 bls, Wm M Allison & Co, Yokohama
100 bgs, M J Golombeck, Yokohama
160 bgs, John Holt & Co, Apapa
260 bgs, Becker Mayer Seed Co, Lagos
195 bgs, Murwal Inc, Lagos
50 bgs, Becker Mayer Seed Co, Kobe
50 bgs, M S Cowen, Kobe
200 bgs, Karl H Landes & E Balint, Kobe
100 bls, Yokohama
PETROLEUM, CRUDE—115,000 obls, Socony Mobil Oil Co, Puerto La Cruz
68,271 bbls, Metropolitan Petroleum Corp, Maricaibo
102,875 bbls, Hess Inc, Bajo Grande
196,121 bbls, Phillips Petroleum Co, Puerto La Cruz
a-PICOLINE—192 dms, H A Gogarty, Avonmouth
PIMENTOLEAF OIL—2 dms, D W Hutchinson & Co, Kingston
2 dms, S B Penick & Co, Kingston
5 dms, George Lueders & Co, Kingston
PLASTER OF PARIS—130 bgs, Smith & Nephew, Liverpool
POLLACKLIVER OIL—50 dms, Hanover Bank, Yokohama
20 dms, R S Reade, Yokohama
10 dms, Wilbur Ellis Co, Yokohama
POPPY SEED—100 bgs, Levy & Levis Co, Rotterdam
100 bgs, Biddle Purchasing Co, Rotterdam
100 bgs, R J Spitz, Rotterdam
1,000 bgs, P J Hanrahan, Gdynia
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100 bgs, Louis Furth, Rotterdam
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PERMANGANATE—75 dms, L Kleyman Corp, Hamburg
302 dms, H A Gogarty, Rotterdam
SILICATE—907 bgs, Sylvania Electric Products, Rotterdam
PSYLLIUM SEED HUSKS—300 bgs, T M Duche & Sons, Bombay
240 bgs, Prentiss Drug & Chemical Co, Bombay
PYRIDINE—268 dms, Kolon Trading Co, Gdynia
QUEBRACHO EXTRACT—500 bgs, Barkey Importing Co, Buenos Aires
548 bgs, Bankers Trust Co, Buenos Aires
3,058 bgs, American Tanners Ltd, Buenos Aires
1,960 bgs, River Plate Corp, Buenos Aires
QUINCE SEED—100 bgs, Alicante
162 bgs, Khorramshahr
QUININE HYDROCHLORIDE—4 dms, Chas L Huisking & Co, Hamburg
RADIUM ELEMENT—1 cs, Radium Chemical Co, Antwerp
RED IRON OXIDE—200 bgs, J Lee Smith, Hull
ROSEMARY OIL—13 dms, Seville
SABADILLA SEED—3 bgs, S B Penick & Co, Hamburg
SACCHARIN—15 dms, Leviant & Co, Rotterdam
10 dms, H A Gogarty, Rotterdam
SAGE LEAVES—8 bls, Meer Corp, Genoa
OIL—10 cs, Superintendence Co, Rijeka
SAGO FLOUR—334 bgs, R Lennard & Co, Singapore
SALVADOR—5 dms, Meer Corp, Cutuco
SAPONINE—10 dms, Karr Ellis & Co, Liverpool
SAVORY LEAVES—17 bgs, Alicante
SCARLET BASE—4 dms, Hensel Bruckmann & Lorbacher, Rotterdam
SEEDLAC—750 bgs, United Shellac Corp, Bangkok
750 bgs, Gillespie Rogers Pyatt, Bangkok
500 bgs, East Asiatic Co, Bangkok
500 bgs, Wah Chang Corp, Bangkok
250 bgs, A Isaacs & Sons, Bangkok
250 bgs, Bradshaw Praeger & Co, Bangkok
1,250 bgs, Bangkok
400 bgs, Calcutta
SENNA CONCENTRATE—26 cs, London
LEAVES—37 bls, Meer Corp, Port Sudan
SESAME SEED—4,630 bgs, Independent Halvah & Candies, Cutuco
395 bgs, Sacharen Bros, Cutuco
1,456 bgs, Ideal Trading Co, Puerto Barrios
HULLED—133 bgs, R J Spitz, Port Sudan
132 bgs, Becker Mayer Seed Co, Port Sudan
SHARKLIVER OIL—5 dms, Collett Week Corp, Oslo
SHELLAC—100 bgs, Gillespie Rogers Pyatt, Calcutta
100 bgs, Calcutta
SIMARUBA BARK—3 bls, S B Penick & Co, Kingston
SODIUM ALGINATE—20 cs, T M Duche & Sons, Oslo
CYANIDE—887 dms, Chemical Manufacturing Co, Liverpool
NITRATE—2,000 tons, Guaranty Trust Co, Tocopilla
10 bgs, Guaranty Trust Co, Tocopilla
PERSULFATE—9 dms, City Chemical Corp, Rotterdam
SULFATE, ANHYDROUS—3,100 bgs, Lo Curto & Funk, Antwerp
SOYBEAN OIL—3 kgs, S A I M A, London
STARCH—800 bgs, Morningstar Nicol, Rotterdam
TALC—2,700 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—10,194 bgs, Stein Hall & Co, Bangkok
1,000 bgs, Morningstar Nicol, Bangkok
3,000 bgs, Internatio Rotterdam, Bangkok
660 bgs, Geismar & Co, Bangkok
1,500 bgs, American Key Products, Bangkok
1,445 bgs, Madagascar Agencies, Tamatave
2,100 bgs, Harry F R Dolan Jr, Bangkok
TERPIN HYDRATE—18 dms, Rotterdam
THYME LEAVES—25 bgs, M J Golombeck, Marseille
16 bls, S B Penick & Co, Marseille
48 bls, Wm E Martin & Sons, Marseille
38 bls, Seek & Kade, Marseille
98 bgs, Alicante
TRAGACANTH GUM—9 cs, Tragacanth Importing Corp, Khorramshahr
108 cs, Am-Iran Corp, Khorramshahr
TRICHLOROACETIC ACID—10 dms, Mercer Chemical Corp, Bremen
TRICHLOROETHYLENE—100 dms, Chemical Manufacturing Co, Liverpool
68 bbls, Kolan Trading Co, Gdynia

—*Continued on page 71*

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Agricultural Chemicals

Movement of fertilizer materials was reportedly being stepped up in the southland, dealers reported, though the market on the whole continued to show a moderate tone. Supplies remained plentiful, though a heavy shipment of ammonium sulfate to Korea offered some comfort. No price changes were reported (with the exception of one minor animal protein movement—hoofmeal up 25c.) that reflected any truly significant activity. The feeling is that the weather to the north has been without character and therefor has not enabled the seasonal period to develop along any definite lines. The feeling continues that unless some unforseen activity should take place, the market will be curbed by the farmer's limited financial position and the plentitude of stock that exists. The soil bank program offers some hope but even this is questionable and at best will offer only limited assistance.

The 1954 Census of Agriculture, recently released, noted that about 60 percent of U. S. farms received some application of fertilizer in 1954. However, only 25.6 percent of the total cropland and improved pasture received fertilizer in 1954, which was the peak year for fertilizer sales. Farmers paid $8.79 for the average of 309 pounds they applied to each of those acres.

The report also noted that during the period since 1944, expenditures for fertilizer have nearly doubled. Greatest growth in fertilizer expenditure was experienced in the West North Central States, where the increase of purchases of fertilizer amounted to about 11 times more or an advance to $162.7 million from a $14 million figure.

Comparing crops as consumers, the Census found that corn was the top fertilizer customer. Corn consumed over six million tons, nearly one third of the total fertilizer used in the United States. About a third of that 6 million tons was applied to corn grown in the Corn belt, although only half of the corn acreage in the area received any application of plant food.

Price Trends

Advanced

Hoofmeal, 25c. per ton.

Reduced

None.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
110.21	110.19	109.99	110.78

For Current Prices See Page 9

Animal and Plant Foods

Ammonium Sulfate—67,000 tons of this material will be supplied to Korea by United States producers, it has been reported. Also supplying ammonium sulfate will be Japan with 55,000 tons and Canada with 12,500 tons. Shipments will be made over the next few months.

Animal Proteins—Little movement in this market was reported last week with the only price shift, that of hoofmeal which climbed 25c. per ton, considered of no lasting significance. The fish meal and fish scrap industry continued in its hiatus period, with a number of plants closed for seasonal repairs.

A recent study has shown a new use for fishmeal that may have far reaching effect in the industry. According to Jame M. Hundley, nutrition adviser to the United Nations International Children's Emergency Fund, fishmeal can be processed in such a way as to remove the fishy taste and odor and thus become an important weapon against protein malnutrition in the underdeveloped areas of the world. Such processed fishmeal, it was said, contains 70 to 80 percent protein and relatively small amounts are needed to supplement bread and other cereal products. Estimates are that only about one-fourth cent a day would be required to supplement a child's diet effectively with the processed fishmeal.

Phosphate—Domestic output of phosphate rock ore and total marketable production of phosphate rock from July 1, 1955, through June 30, 1956, increased 15 percent and 11 percent, respectively, above the estimated figures for the year ending June 30, 1955, according to reports by producers to the Bureau of Mines.

Production for the last sales year amounted to 46,737,794 long tons (mine production) and 14,409,401 long tons (marketable production) with phosphorus pentoxide contents of 5,497,741 and 4,579,811 long tons, respectively with the total value placed at $89,099,663 at an average value of $6.18 per long ton.

These figures compare with those of the year previous when 40,480,000 long tons were produced at mines with marketable production at 12,965,333 long tons. Total value for the 1954-55 period was computed at $80,228,132 at an average worth of $6.19 per ton.

Phosphate rock sold or used by Florida producers last year, the Bureau of Mines report said, totalled 10,337,330 long tons with P_2O_5 content of 3,447,140 long tons. Evaluation for the year's production was placed at $64,171,055 computed at a long ton average price of $6.21. These figures compare with the figures for the year previous which shows production at 9,585,709 long tons with a P_2O_5 content of 3,167,799 long tons. The total production value was said to be $59,869,569 long tons computed at an average per ton value of $6.16.

Sulfur—In December, 1956, the sulfur industry produced 534,088 long tons of native sulfur and 43,750 long tons of recovered sulfur in the United States, according to reports of producers to the Bureau of Mines. The Bureau further noted that annual returns showed 1956 production of native sulfur stood at 6,427,229 tons, 12 percent higher than the 5,743,344 tons produced in 1955. However, mine or plant shipments for 1956 stood at 5,699,598 as compared with the 5,838,851 shipped in 1955; sales for 1956 were reported at 5,671,977 tons as compared with 5,790,166 tons for 1955 and producers stock last year stood at 3,936,450 as compared with the 1955 figure of 3,181,198. All three sets of these relative figures show a decline of activity in this market last year, despite the surge in production.

Recovered sulfur statistics, on the other hand, reflect a different story. Production for this material during 1956 was 480,980 tons as compared with the 401,650 tons produced during the year previous. Mine or plant shipments during 1956 amounted to 486,226 tons as compared with 404,223 tons for 1955; apparent sales were listed at 481,801 tons last year against 400,125 the year previous, while producers stocks stood almost at a level with 1956 listing at 119,446 tons against the 120,267 tons for 1955.

Pesticides

DDT—Dealers and producers here on spot last week reported a growth in inquiry as the seasonal buying period developed further toward its prime period. Though interest is to a degree more limited than had been anticipated, there is still some hope that the season will develop fully.

The Ceylon Ministry of Health (P. O. Box 500, Colombo) has invited bids for 400 long tons of DDT, 75 percent wettable powder. The bids should be sent to Chairman, Tender Board (above address); the deadline is April 2.

Superphosphate & Other Phosphatic Fertilizer Production

Following are data compiled by the Bureau of the Census indicating superphosphates and other phosphatic fertilizer produced and shipped in the United States, January to December, for this year and 1955. Included are percentage changes. All material is 100 percent A.P.A. in short tons.

Grade	1956 Production	1956 Shipments	1955 Production	1955 Shipments	1956 Production	1956 Shipments
Normal	1,493,013	819,054	1,557,073	837,506	— 4	— 2
Enriched	12,888	5,118	39,042	14,130	—67	—64
Concentrated ...	751,831	718,622	706,584	632,327	+ 6	+14
Wet-base goods.	6,729	6,055	7,800	6,762	—14	—10

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Essential Oils, Aromatics

Lemongrass and citronella oils, two materials that had been showing a soft tone for some months, slipped in price last week as source markets of both led downward movements. In both instances, producers and dealers attributed the declines to overproduction and heavy supplies in both spot and shipping areas. Formosan citronella oil dropped 15c. per pound to a $1.20 spot listing while lemongrass moved down 10c. to a $1.45 per pound listing. In other areas of the market the mint oils continued even in tone while nutmeg, anise, ginger and celery oils remained on the strong side. The nutmeg oil situation might shift in the light of continued declines in the price of source material on spot. The citrus oils remained strong, dealers noted, with quantities of material moving on inquiry for seasonal demand.

A dealers report noted last week that the seeds and spices market declined even further. One section of the trade, it was said, seems convinced that the time is right for sales of forward shipments and deliveries containing the Sarawak option. As a result, a fair volume of business was done in those positions, made possible by increased consumer interest at the 21c./23c. levels.

Reports of an early Sarawak crop had a great deal to do with this weeks break, and while India followed, it did so very reluctantly. It should be remembered, it was noted, that 22c. for M/L/S deliveries had already been reached briefly last May, for October delivery, when a Singapore shipper sold May Sarawak at 21½c. This year the same party made the same sale. Last year, however, freight was about 1c. less than at present.

The suddenness of the decline, though ranging only about from 4 percent to 6 percent, came as a surprise.

One producer changed price schedules on vanillin and ethylvanillin, effective immediately on spot and April 1 on contract.

Price Trends

Advanced

None.

Reduced

Oil, citronella, Formosan, 15c. per lb.
Lemongrass, 10c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
145.37	145.39	138.25	135.36

For Current Prices see Page 9

Essential Oils

Anise—Supplies of anise oil continued limited, it was reported, though it was conceded that there was no pressing demand for the material. With the decline in export sales of anethol, conditions for the material have eased with a recent price break. The soft tone is expected to continue. Dealers here attributed the situation to an increase in shipments of Chinese anise oil to Europe, thus reducing the need there for American made anethol.

Bois de rose—1955 marked the end of a three year period of controlled production and marketing of oil bois de rose. Among the various factors which made the old pattern of control ineffective these were the most crucial, according to the report of one major dealer:

1) the differential between the price the consumer had paid and the price the producer obtained for his oil was excessive. It tempted the producer to sell part of his oil through the black market by which operation he not only obtained a better price but also currency benefits and he avoided at the same time some of the export taxes.

2) more oil was produced than agreed upon.

3) Peru emerged as a new producer of oil bois de rose.

With the old agreement inoperative, prices began to slip the level of no return. Ways and means were studied to work out a better arrangement. In August, 1956, a new agreement was signed between a major exporter in Rio de Janeiro and the major producers in Brazil and in Peru. The agreement will call for a specified amount of oil at a specified price and put the producer under obligation to curtail production and to abstain from selling to other parties.

In establishing export prices, the report noted, the Brazilian exporter tried to narrow the spread between the black market price and the official export price in the hope that this will discourage smuggling. The new agreement has been in force for about six months and there have been few transactions below the established market prices. It appears, the report continued, that the following three factors have effectively controlled violations:

1) the broadening of the Rio de Janeiro dealer's agreement with the Brazilian producers by a parallel agreement with the main producers in Peru.

2) the better purchase price which the exporter pays to the producers compared with the previous agreements.

3) the narrower spread between this purchase price and the export price.

4) the curtailing of production.

Whether the present formula will also work, in the future, the report says in conclusion, will depend largely on the question of whether production can be effectively controlled.

Citronella—Formosan quality material slipped in listing again last week, dealers here reported, following a prolonged period of ease on the spot scene. The current listing, a $1.20 to $1.35 per pound range, is 15c. lower than previously quoted. The present relaxed position of this market is resultant of over production at source, dealers here reported. Though the Formosan citronella oil production for 1956 was lower than the year previous, it was still too heavy a lot for the market to properly digest it. However, agricultural authorities on Formosa are working to curb the present situation and this year's crop should be even smaller than the one for last year.

Geranium — This material continued tight on spot last week at recently advanced prices, dealers here reported. The current listing of about $15 per pound stands following an advance of 75c. made early in February. Reports from primary center at that time noted that a very tight supply position there with heavy orders in the final quarter of last year having cut into supplies. In the light of this, and with the supply situation here following that of source so closely, there is little doubt that further advances may follow.

Lemongrass — This material dropped 10c. to a $1.45 per pound on spot last week, dealers here reported, as the softening tones at source continued to grow. One dealer noted that source positions declined 4c. per pound in the period of a few days. The condition of lemongrass oil has been soft for some time, it was noted. Heavy production has been the cause, dealers agree. At present, an organization of dealers and producers in India is working toward control of output but this action will merely curb the markets future condition and cannot possibly have any immediate bearing on spot conditions. At present, supplies at both spot and source are plentiful and the decline in spot prices was inevitable. The depth to which the market sinks, of course, will depend upon what braking action is taken at source and in the shipping market.

Peppermint—Though some sources disagree, most dealers concede that this market is in a bearish position and shows little signs of shifting. Earlier hopes that the quick sale of inferior material, resultant of a second cutting of peppermint last year, would bring about a strong market position have all but been squashed.

Imports Detained at N.Y.

Period Ended Feb. 22

Black Pepper, 16 lots, 1,450 bags.
Cassia, 7 lots, 698 bales.
Chillies, 140 bags.
Cloves, 6 lots, 580 bags.
Coriander Seed, 250 bags.
Dill Seed, 138 bags.
Gum Karaya, 8 lots, 328 bags.
Fennel Seed, 78 bags.
Mace, 12 cases.
Nutmegs, 6 lots, 411 bags.
Olives, 2 barrels.
Papain, 27 cases.
Pimento, 100 bags.
Sesame Seed, 3 lots, 966 bags.
Thyme Leaves, 2 lots, 210 bags.

Essential Oils

High quality oil continues to command a good price but this offers little consolation to the rest of the market which continues on a relatively low level. The entire situation is attributed to the unexpected heaviness of last year's production in both this and spearmint.

Seeds and Spices

Ginger—This oil remained in a relatively firm position last week, dealers here reported. The position is attributed to a shortness of source spice material here at spot. At present, ginger newcrop is in the process of being shipped and should soon be arriving at spot. However, even considering that positions for source material shift downward (which they won't with any immediacy) the oil should not be moved until sometimes afterwards. Thus, ginger oil should continue on a firm even keel for some little time, most dealers agree.

Nutmegs—This material, which at one time was the strongest and fastest moving in the market, continued on its downward streak last week, dealers here conceded. The new listing for West Indian nutmeg is $1.85, 15c. less than previously quoted and East Indian material also dec ined 15c. per pound. The material on the whole has been showing softening tendencies for some time and has been on the decline, pricewise, for the past month. This is a perfect key to the current market condition, but the theory was that nutmeg could not fall. This argument was based upon the premise that supply was so short that nothing could rock the market. However, the present situation is attributable, some dealers agree, to the heavy listing that prevailed in the market at the turn of the year.

Pepper—The market drifted slightly during the week, one dealer here reported. The pressure to move the accumulation of goods on the dock has kept the spot market easy. On top of this, there has been some willingness in the New York market to discount spot prices on future deliveries for Sarawak. This grows out of the fact that the market is approaching Sarawak's new crop shipping period, May, June and July. India ruled fairly steady despite the decline here. However, business with source has been reportedly very light. It is a question, one dealer said, of whatever the stability can be maintained without improvement in the demand for this market. Obviously it will take some time for the trade to absorb the arrivals and deliveries now being made. During this period, there will be little incentive to buy at source. In time, this will cause arrivals to fall off, it was suggested, and thus set the stage for a possible firmer market.

Prices for white pepper moved lower in dull business. Oddly enough, it was noted by one dealer, arrivals during February were small and those for January were said to be under 100 tons. The visible supply afloat is claimed to be small; new crop shipments will not come out before June or July. Dealers hope that as a result, there may be some salvagable time left in this market.

Last years imports of red peppers were, according to a dealer, below those of a year ago and also below the average imports of 1949 through 1953. There reserves here are claimed to be low. Imports from Japan that are arriving now are somewhat smaller than those of a year ago.. Prices at source have stood steady supposedly as a deterent to overly heavy buying. Cayenne grades are tight; Mombassa holdings are down to a few lots, and only odd lots of Nigerian and Gondar are in sight.

Chicago Chemists to Meet

William Burdell Baker, of S. B. Penick & Co., New York, will speak on "Antibiotic Considerations in the Cosmetic and Allied Fields" before the March meeting of the Chicago chapter of the Society of Cosmetic Chemists, at the Western Society of Engineers, Chicago, March 12.

Scottish Executive Visiting in US; May Be Reached at Gane & Ingram

Dr. F. R. Smith, a director of T. & H Smith, Ltd., Edinburgh, is visiting the United States on behalf of his company and its subsidiary, Duncan, Flockhart & Co., Ltd., to make contacts on research and development. He can be contacted through the company's agents, Gane & Ingram, Inc., New York, from March 5 through 20.

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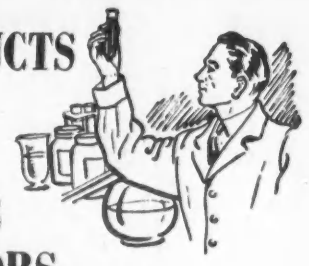

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ACS Is Planning Big Spring Meeting

—Continued from page 7

described at technical sessions sponsored by twenty scientific and technical divisions of the society. Nutrition, air pollution, cancer, and the status of chemical education are among the many other subjects to be considered.

Priestley Medal to Daniels

The Priestley Medal, highest honor in American chemistry, will be presented to Prof. Farrington Daniels of the University of Wisconsin, world authority on both atomic and solar energy, at a general assembly of the society to be held in the Band Shell, Bayfront Park, on April 8. Dr. Daniels will speak on "Chemistry and the World's Energy Needs."

Prof. Peter J. W. Debye of Cornell University, nobel Prize winner in chemistry in 1936, is among the fifteen other outstanding scientists who will receive awards at the general assembly. Presentation of fifty-year membership certificates to sixty veteran chemists and chemical engineers will be another highlight of the evening. In case of rain, the event will be held in the McAllister hotel.

Dr. Willard F. Libby, member of the Atomic Energy Commission, is among the distinguished speakers who will be heard at luncheons and dinners sponsored by several ACS divisions. He will address a joint luncheon of the division of industrial and engineering chemistry and the division of petroleum chemistry on "The Chemist and Peaceful Uses of the Atom."

"The Fragile Male" is the title of a luncheon address to be delivered by Dr. James O. Bond of the Florida State Board of Health before the division of medicinal chemistry. The division has scheduled a symposium on geriatrics, which will consider the chemical aspects of hardening of the arteries and other problems of the aged.

Dr. Norris W. Rakestraw, professor of chemistry and head of the chemistry division of the Scripps Institution of Oceanography, La Jolla, Calif., will describe "The Sea as a Biochemical Environment" at a symposium on marine biochemistry sponsored by the division of biological chemistry. The nutritive value of sea salt and the importance of trace amounts of elements to the health of plants, animals and human beings will be featured in a symposium of the division of agricultural and food chemistry.

'Marketing in Southeast'

"Chemical Marketing and Production Trends in the Southeast United States" is the theme of a symposium planned by the division of chemical marketing and economics. The current status of the textile industry and the phosphate industry, and economic indicators for long-range forecasts, are other subjects to be considered by this group. The division of cellulose chemistry will hear reports on improved cotton materials in a symposium on "New Chemically Modified Cellulosic Fibers."

Research on cigarette smoke and the chemical effect of sugar in tobacco will be discussed in a symposium on "Carbohydrates in the Tobacco Industry," planned by the division of carbohydrate chemistry. This division also will sponsor a symposium on the utilization of bagasse. Methods of extracting resin and gums from pine trees, the industrial expansion of terpenes, and the history of the resin industry will be surveyed in a symposium on "The Literature of Naval Stores," to be held jointly by the divisions of chemical literature and paint, plastics and printing ink chemistry.

MCA Appoints Advisers For Education Activities

Elbert C. Weaver, instructor in chemistry on the George Peabody Foundation at Phillips Academy (Andover, Mass.), has been appointed senior education adviser for the Manufacturing Chemists' Association. Dr. James K. Hunt, formerly of E. I. duPont de Nemours & Co., Wilmington, Del., has been named education adviser.

Both men will assist in the development and execution of MCA's expanding aid-to-education activities, devoting special attention to work on the program for teachers and students of senior high school chemistry.

They join Dr. William E. Chace, director of education, who for the past two years has been in charge of the overall program which is conducted with the guidance of a twenty-two-man education advisory committee.

Mr. Weaver will serve on a part-time basis for the present through an agreement with Phillips Academy, where he has been a teacher since 1943. Dr. Hunt recently retired as technical and educational adviser of duPont's public relations department after thirty years of service.

Drug, Chemical Firms

—Continued from page 4

section has joined with the New York City Board of Education in an effort to rekindle the science teacher's fervor for his chosen profession by bringing him in direct contact with the latest laboratory and industrial technics during the summer vacation period.

Program Still in Infancy

"This summer-employment-of-science-teachers-program began only three years ago and is still in its infancy. Yet, we find it is meeting with outstanding success among the teachers. School officials also tell us the teacher passes on to his pupils a broader understanding, a sense of participation and application that has always been desired. The pupils respond with greater interest and desire to participate," Mr. Hayden continued.

The speaker also quoted firms such as Sylvania Electric Products, Inc.; American Cyanamid Company; Union Carbide & Carbon Corporation; Socony Mobil Oil Company, and the Chas. Pfizer & Co., as reporting highly satisfactory evaluations of the teachers' work on company projects and complimenting the program as an excellent means of improving community relations.

He urged more companies to join in the New York City plan and requested those from other parts of the country to initiate similar programs with local boards of education in their own communities.

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Textile, Leather Chemicals

Trading in most textile and leather chemicals was relatively slow last week in line with conditions in the textile industry generally. Natural tanning materials were perhaps the poorest of the lot so far as weak demand and buying interest were concerned. Prices remained unchanged last week, and in the face of recent declines in quebracho extract and wattle bark, this was looked upon in certain quarters as a healthier tone in the market, although buying interest had not as yet shown much improvement.

Mohair production in the seven leading states was estimated by the Department of Agriculture at 18,233,000 pounds. The number of goats clipped in 1956 totaled 3,164,000, up 6 percent from the 2,983,000 clipped in 1955. Dollar value of sales from mohair in 1956 amounted to $15,381,000, an increase of 11 percent over the 1955 figure.

Wool production declined 1 percent in 1956. Production of wool, shorn and pulled, in 1956 in the United States totaled 272 million pounds. Of this total 232 million pounds was shorn and 40 million pounds was pulled. The Department of Agriculture estimated that price received by growers from April 1, 1956, through January, 1957, averaged 42.7 cents per pound, as against the 1955 average of 42.6 cents. Dollar sales volume amounted in 1956 to $99,200,000 as compared with $99,800,000 in 1955. This was 24 percent below the ten year average.

Liquid egg production in January amounted to 24,515,000 pounds, compared with 8,870,000 pounds in January of last year. Egg solids production in January amounted to 2,249,000 as against the 660,000 pounds in January of 1955. Whole dried egg production for January was 685,000 pounds, dried albumin output was 616,000 pounds, and dried yolk production was 948,000 pounds. The comparable figures for the same month last year were 9,000 pounds of whole dried eggs, 437,000 pounds of dried albumin, and 214,000 pounds of dried yolks.

Sizing materials moved in steady volume against contracts, but new business was both slow and spotty. Prices were unchanged from levels which have prevailed over recent weeks. Starches of all types were amply available for quick delivery.

The technical grade of egg albumin was in limited supply, as it usually is, but flake was readily available. The visible supply of corn was good, assuring an ample supply of corn dextrin and starch.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
106.70	106.70	108.25	107.85

For Current Prices see Page 9

Chemicals

Bichromates—Trading was steady at relatively good volume on the sodium and potassium bichromates. The granular sodium salt maintained a firm price position of 13c. per pound in carlots or trucklots, f.o.b. producing plant. Less than carlot or truckload quantities were quoted on the same basis at 13½c. to 14¾c. per pound, depending upon quantity.

Potassium bichromate in carlot or truckload quantities was priced at 18c. per pound f.o.b. producing plant, while smaller quantities were listed at 18½c. to 19¾c. per pound according to quantity.

Sodium Acetate—Business could be described as hardly more than fair. Buying interest was largely confined to immediate needs. Material moved in relatively good ty. Prices were firm and unchanged.

Sodium Hydrosulfite—Price patterns were unchanged from those which have prevailed over recent weeks. Buying interest was largely confined to immediate needs. Material moved in rlatively good flow against previously placed orders.

Sulfonated Oils—Business was generally slow in line with textiles in general. Buying was spotty, and chiefly for immediate requirements only. Price listings were unchanged from levels which had prevailed over recent weeks.

Sizing Materials

Albumin, Blood—Trading was confined to immediate needs, and prices were maintained in the range of 65c. to $1 per pound, depending on quantity. Supplies were more than ample to meet all needs.

Corn Starch—Demand was not heavy and consumers were able to promptly obtain their immediate requirements from quite ample supplies. Prices were firm and unchanged from previous levels, with pearls at $7.32 per 100 pounds in bag carlot quantities, and powder at $7.44 per 100 pounds on the same basis, New York.

Egg Albumin—January production amounted to 616,000 pounds as against the 437,000 pounds produced in January of last year. Business was steady at a moderate volume. Prices held to $1.45 to $1.47 per pound on flake and $1.49 to $1.51 on powder, on a spot basis. Technical material priced at $1.08 to $1.10 per pound was somewhat scarce.

Egg Yolk—January output of egg yolk amounted to 948,000 pounds of dried yolk, as compared with the 214,000 pounds turned out in January of last year. The market was described as steady with supplies adequate but not abundant. Price patterns prevailing in the market last week ranged from $1.05 to $1.09 per pound, varying as to quantity and seller.

Potato Starch—Business volume was described as moderate. Material moved in relatively good volume against prior orders and contracts. Buying interest was currently said to be confined to immediate needs. Maine starch was quoted at 6¼c. per pound in carlot quantities f.o.b. plant. Idaho starch was quoted in carlots at 6c. per pound.

Tapioca Flour—Prices remained in the range of 12 to 13½c. per pound on Brazilian. Material moved well against contract, but new business was relatively spotty and slow. Replacement offerings were said to be quite free on Siamese material.

Tanning Materials

Chestnut Extract—This market was unchanged and steady. Solid extract guaranteed 60 percent was unchanged at 9.33c. per pound, carlots, exdock, plus duty, prompt shipment and powdered, 70 percent, 10.85c., same basis.

Cutch—Good buying interest was reported on this item, with offers for shipment not regarded as liberal. Ex dock prices on replacements were unchanged at 8½c. per pound.

Mangrove Bark—African remained at levels of around $62 per ton ex dock, Colombian at around $57 and Ecuadorian at $54 per ton. Business volume was small and trading was slow.

Myrabolans—J-1 was priced ex dock at $61 to $62 per ton, Bombay at $58 to $59, and crushed at $79 to $80 per ton. Demand was light and trading was limited to nearby lots.

Quebracho Extract—The market continued slow with buying interest lagging. However, the price structure did not decline any further last week. Solid remained at 10.7429c. per pound and ordinary at 9.8035c. in carlot quantities ex dock, plus duty. Included in these prices was ocean freight at $23.46 per long ton, as well as marine and war risk insurance. With prices holding for the last two weeks, some quarters looked for renewed buyer interest on the part of those who were waiting to see if the market went lower.

Wattle Bark—With Quebracho holding at the recently declined price levels, Wattle tended to stabilize last week and stayed at the new lower prices attained during the previous week. Trading in tanning materials was generally dull, and as yet the new lower price schedules had not attracted any substantial buying.

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Coatings Materials

A major resins manufacturer last week announced increased quotations on bulk quantities of urea and melamine surface coatings resins. The increases, ranging one-half cent to one cent per pound, will become effective April 1. Under the revised schedule, basic bulk prices in the East will be 32.75 cents per pound for melamines and 20.5 cents per pound for ureas, with Western quotations 1 cent per pound higher. The new prices reflect increased costs of production, packaging and transportation, the company said.

Titanium pigments are expected to move briskly this month as producers rush to fill the many orders received before the effective date of the recent price advance. Meanwhile, production facilities are working at capacity in preparation for the spring buying season. The advance, which has become unanimous in the trade, called for a 1 cent per pound increase in anatase and rutile. The new carload quotations are 25½ cents and 27½ cents per pound, respectively.

Pigments in general are showing a stronger tone with the advent of warmer weather in many parts of the country. Prices of lead and zinc pigments are steady and unchanged at levels established about a year ago—thus continuing an exceptionally long period of stability. Copper oxide prices are reported to have settled at the lower listings announced a week earlier, indicating a steadier tone in the basic metal. The latest decline in copper chemicals brought oxide quotations down to 48c. to 50c. per pound for black and 57 cents to 61 cents per pound for red, depending upon type and quantity.

A steadier tone has prevailed in bleached shellac over the past month, dealers reported last week. The orange grades, however, remained somewhat easy, declining 1c. per pound during the week. Latest quotations on orange shellac are 38 cents per pound for superfine, 37 cents per pound for lemon No. 1, and 39 cents per pound for No. 2. The TN price is generally nominal.

Production of carbon black in January was three percent higher than in December, the Bureau of Mines reported last week. Shipments showed an increase of four percent over the previous month, the Bureau noted. January production reached 157,862,000 pounds while shipments totaled 161,072,000 pcunds. Producers' inventories amounted to 334,618,000 pounds. Details of this reports are provided below under 'Prime Pigments.'

Price Trends

Advanced
None.

Reduced
Shellac, orange grades, 1c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
100.77	100.77	100.79	100.08

For Current Prices see Page 9

Prime Pigments

Antimony Oxide—Sales were beginning to pick up last week with the advent of spring weather accompanied by increased demand for outdoor coatings. Price was steady and unchanged at 27c. per pound for tankcars and 28½c. per pound for smaller shipments.

Cadmium Colors—Prices of the straight colors and selenide lithopones are steady and unchanged at the reduced levels announced in January. Selenium metal is now amply available because of termination of the government's stockpiling program for that metal. Mercury lithopones are steady at the price levels established when the materials were introduced.

Carbon Black—The following figures in thousands of pounds, indicate production, shipments, stocks and exports of carbon black for January, 1957, with figures for December, 1956, and January, 1956, reported for comparison:—

	Furnace	Contact	Total
Production			
January, 1957	126,299	31,563	157,862
December, 1956	122,187	30,459	152,646
January, 1956	127,818	32,222	160,040
Shipments			
January, 1957	125,384	35,688	161,072
December, 1956	118,391	36,323	154,714
January, 1956	124,279	33,256	157,535
Stocks			
January, 1957	261,233	73,385	334,618
December, 1956	260,318	77,510	337,828
January, 1956	136,287	95,294	231,581
Exports			
January, 1957	*	*	*
December, 1956	24,309	19,717	44,026
January, 1956	21,806	11,886	33,692

* Not available.

Copper Oxide—The oxides were steady last week, reflecting a more stable market for the basic metal. The last decline in copper chemicals brought oxide quotations down to 48c. to 50c. per pound for black and 57c. to 61c. per pound for red, depending upon type and quantity.

Lead Pigments—These pigments were moving steadily in moderate volume last week, producers reported. Current listings have been in effect since a year ago—continuing an exceptionally long period of stability. Buying interest was said last week to be showing the first signs of the spring upturn.

Titanium Pigments—Material for March delivery was in limited supply, producers reported, because of the many orders received before the effective date of the recent price advance. Otherwise, production facilities are judged adequate for the current market. The advance moved quotations up to the following levels:—anatase, carloads, 25½c. per pounds; less than carload to five tons, 26c. per pound; less than five tons, 26½c. per pound; rutile, carloads, 27½c. per pound; less than carload to five tons, 28c. per pound; less than five tons, 28½c. per pound.

Fillers and Inerts

Gypsum—Approximately 7.6 billion square feet of gypsum lath and board were shipped in 1956, as compared with 7.8 billion square feet in 1955, the Department of Commerce recently reported. The decline is said to be partly attributable to the tight financing conditions that developed late in the year. These conditions brought about an abrupt downturn in housing construction, thereby cutting down a major gypsum outlet.

Against the general trend in gypsum use, the decline last year would appear insignificant, trade sources point out. For one thing, last year's sales were easily the second largest in history, nearly a billion square feet higher than the 1954 total. Moreover, since 1938, the continual climb in gypsum consumption has generally progressed by sharp jumps followed by minor declines, these sources note.

Natural Resins

Gum—This line of resins was steady in price last week following two weeks of fluctuations. The last changes recorded were declines, which did not quite offset the gains of the previous week. As a result, prices now are a bit higher than previously—largely a reflection of the fifteen percent increase in freight rates that was made effective February 15. The declines referred to above varied as follows:—Copal, Manila C, 1¼c. per pound; DBB, 1c. per pound; Philippine pale chips and sorts, 1c. per pound; nubs, ¾c. per pound; Dammar, East India batu bold, 2¼c. per pound; black, unscraped, ¾c. per pound; Siam, 1½c. per pound, and Singapore No. 1, ¾c. per pound. Other copal and dammar gums were unaffected.

Shellac—A steadier tone has prevailed in bleached shellac over the past month, dealers report. But the orange grades are still somewhat easy, having declined an additional 1c. per pound in last week's trading. Latest quotations on orange shellac are 38c. per pound for superfine, 37c. per pound for TN, 41c. per pound for lemon No. 1 and 39c. per pound for No. 2. The price of TN is largely nominal.

Synthetic Resins

A major resins manufacturer last week announced increased quotations on bulk quantities of urea and melamine surface coatings resins. Effective April 1, melamines will be advanced ½c. per pound in the area east of the Rocky Mountains. In the same area ureas are to be increased 1c. per pound. West of the Rocky Moun-

Coatings Materials

tains, melamines will be left unchanged while ureas will be increased ½c. per pound, the company said.

The new pricing is intended to reflect an across the board price differential of 1c. per pound between Eastern and Western sales areas, the company reported. Under the revised schedule, basic bulk prices in the East will be 32.75c. per pound for melamines and 20.5c. per pound for ureas, with Western quotations 1c. higher. The new prices are said by the company to reflect increased costs of production, packaging and transportation.

Naval Stores

Pine Gum—For the week ended February 23 the average price per standard barrel of crude pine gum was reported at $25.57, as compared with $25.08 during the previous week and $26.40 a year ago. The volume of gum deliveries to plants was 1,260 barrels, as against 1,545 barrels the previous week and 1,131 barrels a year ago. Average per barrel content was 9.79 gallons of turpentine and 297.6 pounds of rosin. Gum grading percentages were as follows:—WW,2; WG,20; N,25; M,28, and K and below, 25.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Mar. 1	Mon. Mar. 4	Tues. Mar. 5	Wed. Mar. 6	Thur. Mar. 7
Drums—					
H	...	...	$7.90	...	...
I	...	...	...	...	$7.95
K	...	...	7.90	...	...
M	...	...	7.92	...	7.90
N	...	...	...	...	8.10
WG	$8.85	...	8.85	...	...
WW	8.99§	...	9.25	...	8.97§
Bags—					
K	7.84§	...	7.80	$7.77	...
M	7.90	...	7.75	7.75	...
N	...	...	...	8.10	...

Tankcars (for week ended March 1)—
M or better, $7.69§

Sales, USDA
557* 240*[1] 320* 320* 419*

New York
(per 100 lbs., c.l., Friday)
WW, $10.30; WG, $10.00; N, $9.45; M, $9.20; K, $9.35; B through I, $9.20

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	....	...	.58	...	...
Sales	...	...	6,000¶	...	...

New York, Friday, per gal. 7 lbs., tankcars, 66c.; l.c.l., 82c.

* Drums equivalent. ¶ Gallons. § Average price.
[1] Export drums only:—WW, $9.15; WG, $8.80.

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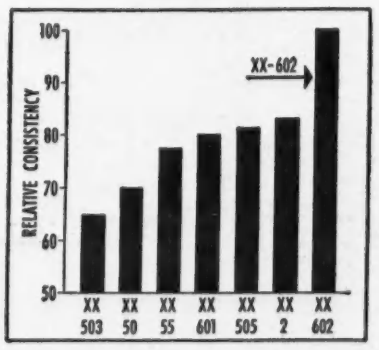

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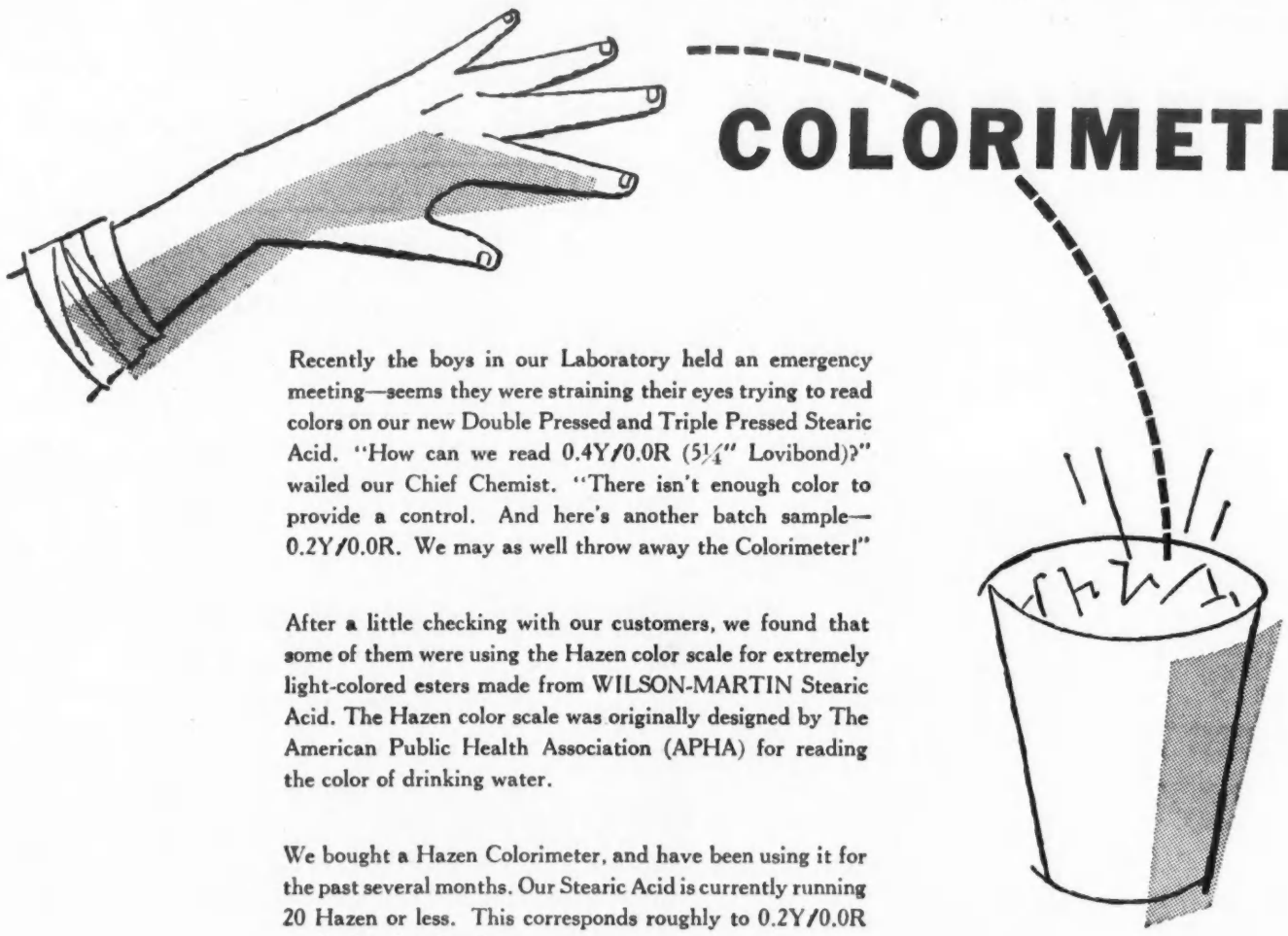

Recently the boys in our Laboratory held an emergency meeting—seems they were straining their eyes trying to read colors on our new Double Pressed and Triple Pressed Stearic Acid. "How can we read 0.4Y/0.0R (5¼" Lovibond)?" wailed our Chief Chemist. "There isn't enough color to provide a control. And here's another batch sample—0.2Y/0.0R. We may as well throw away the Colorimeter!"

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We bought a Hazen Colorimeter, and have been using it for the past several months. Our Stearic Acid is currently running 20 Hazen or less. This corresponds roughly to 0.2Y/0.0R on the Lovibond scale.

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Oils, Fats and Waxes

Market for edible oils was affected last week by news of a strike at processing plants of a midwestern producer. Although demand was not too strong at any one point, soybean oil held steady. Cottonseed, corn oil, and oil meals edged higher. Trading in cottonseed oil futures remained active, with tendencies to liquidate prevailing during the week. Copra was slightly weaker at the Pacific coast, but coconut oil managed to maintain a fairly steady price.

Linseed meal was considerably stronger at Minneapolis, but oil did not decline. Flaxseed stocks were negligible, and some processors were out of the market entirely.

Greases edged upward slightly in the face of light demand, owing to closely held stocks. Edible tallow inquiry was listless, and fractional declines were registered. Trading in inedible grades was negligible both for export and domestic consumption, and prices held about unchanged.

Strength at the Brazilian source again pushed oiticica oil higher. Among other drying oils, tung showed varied activity, with Argentine oil prices higher owing to scarcity of nearby, and domestic tung lower to lack of inquiry.

Fish oils were unsettled and slightly lower. New crop business was hand to mouth, and old crop declined due to lack of interest. Refined fish held unchanged, but prices for light cold pressed oil could have been shaded.

Candelilla wax increased in price due to shortages at source. Refined No. 3 carnauba was also higher. On the down side were Ceara and Parnahyba. Consuming demand was almost absent.

Price Trends

Advanced

Cocoa butter, 1c. per lb.
Greases, ½c. per lb.
Linseed meal, $2 per ton.
Oil, corn, crude, ½c. per lb.
refd., 0.13c. per lb.
Cottonseed, crude, ½c. per lb.
refd., ½c. per lb.
Oiticica, ¼c. per lb.
Tung, imp., ¼c. per lb.
Soybean meal, $1 per ton.
Wax, candelilla, crude, 2c. per lb.
refd., 6c. per lb.
Carnauba, No. 3, refd., pure. 2c. per lb.

Reduced

Castor beans, $5 per ton.
Oil, menhaden, crude, ¾c. per lb.
Oleo, 1c. per lb.
Tung, dom., ½c. per lb.
Oleostearine, ½c. per lb.
Peanut meal, $2 per ton.
Tallow, edible, ½c. per lb.
Wax, bees, crude, African, 1c. per lb.
Brazilian, 1c. per lb.
Chilean, 1c. per lb.
refd., 1c. to 2c. per lb.
Carnauba, No. 1 Ceara, 2c. per lb.
Parnahyba, 2c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	March 9, 1956
120.13	119.40	120.03	98.08

For Current Prices See Page 9

Vegetable Oils

Coconut—Trading was slow, but the market held fairly steady at 11⅛c. per pound, tankcars, f.o.b. Pacific coast and 12⅛c. per pound, New York, same basis.

Corn—Slightly more consuming interest was shown last week, and crude and refined grades edged higher. Crude was quoted at 14½c. per pound, tankcars, f.o.b. mills. Refined salad was higher, listed at 18.16c. per pound, tankcars, New York, prompt delivery, and drums, 20.16c. to 20.41c. per pound, same basis, as to quantity.

Cottonseed—Position was firmer and fractionally higher, with the market for nearby delivery stronger than during the previous week. Forward positions showed gains.

Crude oil rose to 13⅞c. per pound, tankcars, f.o.b. mills, southeast, and was traded thereat. Valley traded at 13⅞c.; Lubbock, Texas, was nominal at 13⅝c., and Waco, 13⅞c., same basis. Refined salad at New York, in tankcars, was lifted to 17½c. per pound, prompt delivery, with drums, 19½c. to 19⅝c., same basis.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, March 8, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar	107	16.40	15.94	15.96@16.02
May	447	16.47	16.02	16.27S
July	332	16.50	16.28	16.33S
Sept.	152	16.34	16.05	16.09@16.11
Oct.	32	15.93	15.93	15.80@15.85
Dec.	39	15.86	15.67	15.70S
Mar.	48	15.68	15.67	15.63@15.65
May (1958)	27	15.70	15.60	15.55@15.62

Total sales and switches, 1,238 contracts.

Linseed—Trading was slightly more active, and the price of 13.2c. per pound, tankcars, Minneapolis, March-June delivery, was considered firm. Ex-warehouse price continued unchanged at 13½c. Raw oil in drums, carlots, New York, remained at 16½c.; less carlots were quoted at 17½c. to 18c. per pound, as to quantity.

Flaxseed—Market was dull and featureless. Offerings were scarce.

Minneapolis.—Dullness persisted in cash flaxseed, offerings negligible and demand apathetic. Crushers reduced bids 3c. a bushel to $3.25, spot and to-arrive, basis Minneapolis. Main reason for lack of activity in cash flaxseed was the curtailed production of area crushers.

There were indications that several large crushers would continue limited crushing operations through April. Selling interest in the country disappeared after recent declines, and crushers apparently had sufficient supplies for nearby operations.

Trade estimates indicated that nearly 17,000,000 bushels of flaxseed were placed under government loan program as of February 15.

Trading in the spot flaxseed market was a complete blank, no trades consummated.

To-arrive bookings totaled 2 cars and 2,200 bushels, bulk occurring ahead of 3c. drop. Arrivals for all accounts amounted to 103 cars, compared with 294 cars a year ago. Shipments totaled 34 cars, against 63 cars last year.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments	
	1956-57	1955-56	1956-57	1955-56
Past week	185,400	514,500	61,200	110,250
Since Sept. 1.	16,046,200	20,945,750	2,218,600	3,713,500

Oiticica—Stocks continued to be closely held, and despite dull demand, prices advanced fractionally. Tankcars rose to 16½c. to 16¾c. per pound, New York, prompt delivery. Drums also edged upward, to 16½c. to 16¾c. per pound, spot, depending on quantity.

Rapeseed—There was little change in this market. Business continued slow, with tankcars quoted at 18¾c. per pound, New York, prompt delivery.

Soybean—Trading in futures was restricted in new crop oil last week. Although demand was dull and featureless, news of a strike at the mills of a midwestern producer help to buoy up the market.

Crude was unchanged, quoted at 13⅝c. per pound, tankcars, f.o.b. Decatur. Refined salad was listed at 16.53c. per pound, tankcars, New York, prompt delivery.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, March 8, follow:

	Sales	High	Low	Close
		Cents per pound		
Mar.	19	13.50	13.32	13.30S
May	3	13.15	13.00	12.95@13.02
July	1	12.64	12.64	12.62@12.69
Sept.	5	12.42	12.37	12.27@12.29
Oct.	1	12.05	12.05	12.00@12.03

Total sales, 29 contracts.

March crude was traded at 13½c. per pound, Decatur, and scattered April was reported at 14¼c. sales.

Tung—Imported was stronger last week despite light trading, and all quantities moved up fractionally. Oil was newly quoted at 24¼c. per pound, drums, carlots, New York; 24¾c. to 25¼c. per pound, les carlots, same basis, as to quantity.

Tankcars at New York were quoted at 22¾c. per pound, prompt delivery; April forward, 22c. and May-June, 21¾c. Scarcity of offerings from the Argentine continued to influence the market.

Lack of buying interest forced domestic oil off fractionally, and last week, quotations were merely nominal at 22½c. per pound, tankcars, f.o.b. domestic mills.

Fats and Greases

Greases—Demand continued spotty, but stocks were closely held, as the tugboat strike continued to be a factor. White

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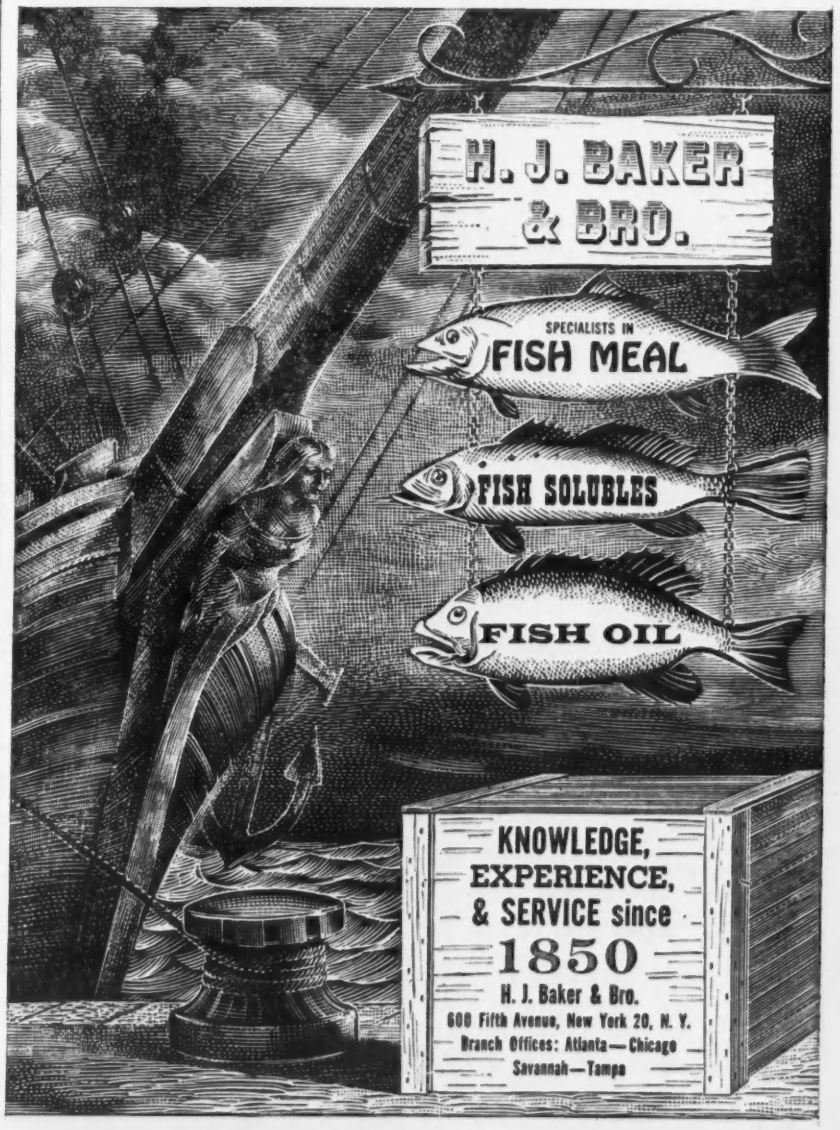

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Oils, Fats and Waxes

choice all hog rose fractionally, quoted at 8⅝c. to 8¾c. per pound, spot. Yellow was scarce and prices increased to 6⅞c. to 7c. per pound, spot, as to quantity, with interest expressed in the lower figure.

Lard—Market fluctuated narrowly, and ended fractionally lower. Cash was quoted nominally at 14.65c. per pound, drums, spot, Chicago.

Tallow—Trading in general was almost nil during the week. There has been little or no export business in edible tallow for the last few weeks. Tankcars declined to 13c. to 13½c. per pound, New York, prompt delivery.

While inedible grades were subject to listless inquiry, the strike continued to cast doubt on shipments, resulting in unchanged prices. Fancy bleachable continued listed at 7¾c. per pound, tankcars, delivered; prime, 7½c. and No. 1, 6⅞c., same basis. Special stocks were limited, and the market was nominal at 7⅛c., same basis. Guaranteed fancy held without change, and was quoted at 9¼c. per pound, drums, f.a.s.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, March 8, follow:

No Sales Last week.

Fish Oils

Menhaden, Crude — Buying interest continued dull, and new crop oil was nominally quoted at 8¼c. to 8⅜c. per pound, bulk, Atlantic and Gulf ports. Old crop was also nominal, listed at 8¾c. per pound, same basis.

Miscellaneous

Castor Beans—This market was reported quiet and beans declined. Prompt shipment was quoted nominally at $180 per ton, f.o.b. Brazilian port.

Imports of castor beans, and castor oil, at New York and Philadelphia last week were as follows:

	Pounds	
	Beans	Oil
Last week		3,430,000
Previous week	1,500,000	1,794,000
Corresponding week 1956		1,216,000
Total this year	9,166,300	19,870,000
Corresponding period, 1956	25,241,000	14,928,000

Cocoa Butter — Trading was reported slow, chiefly for actual needs. Stocks on spot were higher, at 67c. to 70c. per pound, according to quantity.

Copra — This market was inactive and unchanged at $150 per ton, c.i.f. Pacific coast, prompt shipment.

Cake and Meal

Linseed Meal—Supplies were scarcer owing to curtailed crushing operations.

Minneapolis.—Curtailed flaxseed operations of area crushers sparked price advances of $2 to $2.50 for prompt shipment linseed meal. One or two crushers were completely out of the market for nearby supplies and most activity came from re-sellers. Withdrawals against existing contracts continued at an active pace.

Crushers anticipated continued tight supply situation in linseed meal until demand for linseed oil causes resumption of production. Extracted linseed meal, 36 percent protein, was quoted at $54 to $55 a ton for March, $53 for April forward, bulk, in carlots, f.o.b., Minneapolis. Expeller meal, 32 percent protein, was firm at $55.50 for March June.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	14,220,000	12,480,000
Since Sept. 1	383,440,000	449,170,000

Soybean Meal — Demand was holding fairly well although processors can make immediate shipment sales. Prices were holding steady to slightly firmer although at times some spot shipments are discounted slightly.

Forty-four percent bulk soybean meal basis Decatur figures $48 for March and $48.50 for April-September. Mississippi Valley soybean meal was steady in price with offers for March shipment at $49 bulk f.o.b. valley points.

Waxes

Bees—Market was weaker last week, and mainly nominal. Crude African was newly quoted at 67c. per pound; Brazilian, 69c.; and Chilean, 69c., all nominal.

Refined USP white and yellow were also lower. Bleached white bricks were quoted at 78c. to 81c. per pound, and slabs, 77c. to 81c. per pound, 100-pound cartons, spot.

Yellow bricks declined to 69c. to 71c. per pound, and slabs, 68c. to 70c. per pound, 100-pound cartons, depending on quantity.

Candelilla—Light supplies and shortages at source of supply tightened this market. Crude rose to 67c. to 69c. per pound, spot, as to quantity. Refined was also higher, listed at 74c. to 75c. per pound, bags, spot, as to quantity.

Carnauba—Refined pure No. 3 Ceara was higher last week, quoted at 75c. to 76c. per pound, spot. Yellow No. 1 Ceara and Parnahyba grade declined in the face of dull demand, and were quoted at $1.33 to $1.34, for the former and $1.35 to $1.36 for the latter, spot.

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Chemical Industry Ass'n To Hear Carbide Man

"Selling to Large Chemical Corporations—the Buyer's Point of View," will be the subject of a talk to be given by H. Frank Maurer, assistant manager of purchases-raw materials, for Union Carbide & Carbon Corporation, New York, at the March 2 meeting of the Chemical Industry Association in the Chemists' Club, New York.

Mr. Maurer has been with the Union Carbide purchasing department ince 1946. He became a purchasing agent in Carbide' general purchasing department in 1947 and was subsequently appointed assistant division manager—chemicals division, manager-chemicals, and assistant manager of purchases-raw materials. Mr. Maurer stressed that in his address he will be speaking about general industry practice rather than about his company in particular.

Colgate Adds Detergent To Its Industrial Products

Colgate-Palmolive Company, Jersey City, N. J., has announced the addition of "Arctic Syntex 036," a new 100 percent active, non-ionic detergent, to its line of industrial products.

The properties of this new liquid detergent make it compatible with a variety of solvents and other chemicals and, as a result, it is an ideal detergent for many industrial uses, Colgate pointed out.

"Arctic Syntex 036" can be used effectively wherever an economical and efficient wetting, penetrating, emulsifying and cleaning agent is desired, according to the Colgate industrial department. It is not inactivated by acids, alkalies, oxidizing or reducing agents, or by most organic ions.

Research-Cottrell (Canada) Is Established in Toronto

Research-Cottrell (Canada), Ltd., has been formed with offices at 33 Bloor street East, Toronto.

Research-Cottrell (Canada) is a subsidiary of Research-Cottrell, Inc., Bound Brook, N. J., which, with Research Corporation, since 1912 has been producing industrial gas cleaning equipment.

DuPont Will Have

—*Continued from page 5*

their introduction more than a quarter of a century ago, and has come to be identified intimately in customers' minds with these products.

As a registered trademark of the duPont company the term "Freon" is used generally to describe its fluorinated hydrocarbon refrigerents, aerosol propellents, solvents, and fire extinguishing agents. Other registered forms of the trademark incorporate numerals or letters to describe individual compounds, such as "Freon-12" dichlorodifluoromethane.

From an initial laboratory-scale plant at Deepwater Point, N. J., duPont's facilities for producing "Freon" fluorinated hydrocarbons have grown there to an eighteen-acre plant that turns out tons of the material each day.

Other plants of duPont's "Freon" products division are located at East Chicago, Ind., Louisville, Ky., and Antioch, Calif. A fifth plant, operated by the duPont Company of Canada, Ltd., is located at Maitland, Ontario.

Agricultural Chemical Sales

—*Continued from page 5*

million over 1950. Non-real estate loans—for livestock, crops and machinery, and chemicals—totaled nearly $6,303 million as of January 1, 1956, up $1,741 million over the same date in 1950.

Current farm debt outstanding today is about 11 percent of the value of total farm assets, he said. In 1940 the comparable figure was 18.5 percent while in 1950 it was 8 percent.

Mr. Coke said that farmers' expenditures for insecticides, fungicides, and herbicides have increased twenty times since 1920. The amount spent on these products last year, he said, is estimated at $400 million.

Dr. Stanley B. Freeborn, provost of basic introduction to literature is to the potential scientists."

Dr. Freeborn blamed the current dearth of scientists on an "overpowering fear of mathematics and any allied subject." He said the majority of students entering college today are "mathematically illiterate," and urged improved teaching of these subjects in high schools to correct this situation.

the University of California, Davis, Calif., warned that schools make a serious mistake when they train future scientists in highly specialized fields at the expense of giving them a broad, liberal education.

The educator said that in general those who have technical training alone make good bench men, but those who also have liberal arts experience have the broad vision needed in management positions.

"We might just as well face the fact," he declared, "that we are living in a mechanical and chemical age that becomes more dependent on physics, chemistry and biological sciences every day we live."

"Without disparaging any other subjects, it would seem evident that a knowledge of the sciences is as necessary to the graduate in the field of letters as a

Ringwood's Buying Shifted

Ringwood Chemical Corporation has transferred its purchasing activities to its general office in Chicago at 120 South La Salle street. Lester J. Perlman will now operate out of the firm's Chicago office. Ringwood said the move was dictated by reasons of greater efficiency and to put it in closer touch with its suppliers.

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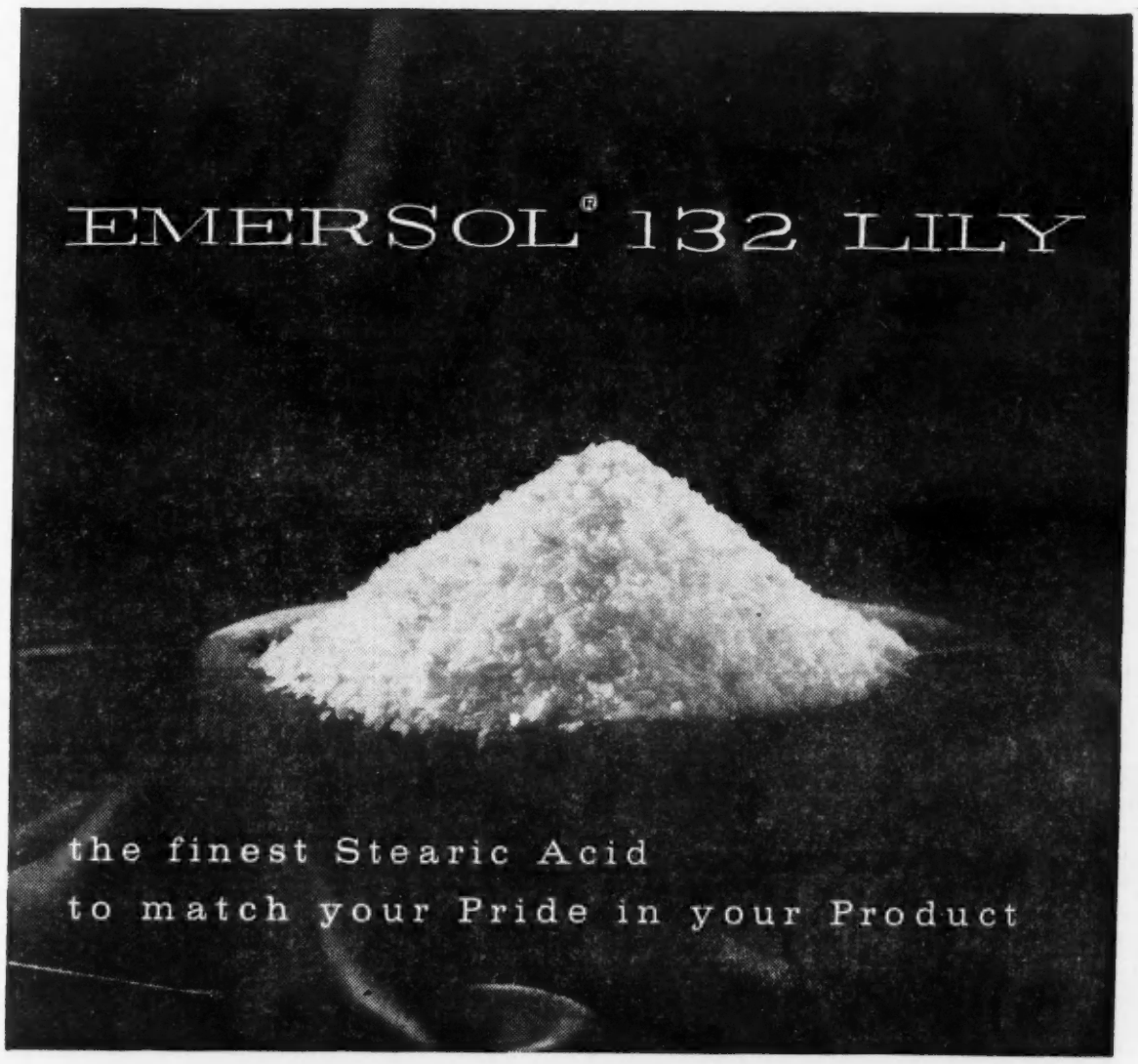

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Explosives, Chemicals Laws on Transport

—Continued from page 3

moved over the highways from the manufacturing plants rose from 63 percent in 1953 to 68 percent in 1954 and to 72.9 percent in 1955.

In addition, a very large volume of ammunition and other explosives has been transported by motor carriers for the military services, it is added. The tonnage figure on this movement is not available.

The letters explain the changes to be made as follows:

"Under the proposed amendment, the provisions of the statute relating to packing, marking, etc., of explosives, and other dangerous articles would be made applicable to shippers tendering goods to interstate carriers regardless of whether the shipments are destined for movement in interstate, intrastate, or foreign commerce. In addition, the proposed amendments are intended to make the provisions which are applicable to carriers apply also to all shipments of dangerous articles, including intrastate shipments handled on interstate vehicles or commingled with interstate traffic. This is to protect interstate passengers, employees of interstate carriers, and the facilities of interstate carriers from the hazards of misdescribed or improperly packed, marked, or prepared dangerous articles moving intrastate commerce as well as interstate commerce.

How Act Would Be Extended

"The present provisions of the act respecting the transportation of explosives on vehicles of common carriers of passengers would be extended by the proposed bill to include all for-hire carriers of passengers by land, and the provisions exempting specified quantities of various articles would be changed so as to authorize the commission to prescribe the kind, amount, and the conditions under which such articles may be carried on such vehicles. The proposed bill would also eliminate the privilege of carrying unlimited quantities of small arms ammunition in vehicles transporting passengers, the commission being of the view that the presence of such items in substantial quantities in buses is undesirable because of the danger of fire in the event of an accident.

Ban on Liquid Nitroglycerine

"Section 833 of the act now contains an absolute prohibition against the transportation of liquid nitroglycerine and other similarly dangerous commodities by common carriers, but contains no such prohibition against the transportation thereof by contract or private motor carriers. The proposed revision is not intended to restrict the transportation of such commodities, or of radioactive materials, or etiologic agents, to any particular class of carrier or persons, but would strictly limit and regulate the transportation thereof by providing that such commodities shall not be transported except under such rules and regulations as the commission shall prescribe. And, in this connection, the commission would be granted authority to determine what explosives constitute 'other similarly dangerous explosives.'

"Under the proposed revision, the existing provisions of section 834, relating to the marking of packages containing explosives and other dangerous articles, would be extended to the tendering of such articles to all for-hire carriers by land and water, and to all persons, whether for hire (such as express companies) or otherwise, carrying such articles upon any interstate carrier by land, including private, as well as common and contract carriers . . ."

In asking for authority to regulate the transportation of etiologic agents, the commission explains that they now are unregulated by the commission because, technically, etiologic agents are not poisons, since toxic material (poison) per se is not a living organism.

The commission says that CAB and the Coast Guard are of the view that shipments of etiologoic agents should be regulated but the ICC should establish the rules therefore, since both of these agencies adopt the rules and regulations formulated by the ICC respecting shipments of explosives and other dangerous articles.

The bill S. 1491 would remove any doubt as to the commission's jurisdiction in the transportation of such commodities by amending the law so as to include specifically radioactive materials and etiologic agents in the list of dangerous commodities.

In providing regulations for these materials, the bill also contains specific authority for ICC to avail itself of the services, advice, and assistance of carrier and shipper associations and the departments and agencies of state and local governments.

Difficult Standard of Proof

As regards the quest to eliminate the word "knowingly" from section 835 of existing law, the ICC explains that the standard of proof presently required to support a conviction for a violation of the commission's regulations makes it extremely difficult to prosecute what have been termed "public welfare offenses."

Such offenses are not necessarily the result of an affirmative intent but fall more within the category of those relating to neglect where the law requires care, or inaction where it imposes a duty to act, the commission adds.

A final important change proposed to be made in existing law by the bill is to make the law applicable to contract and private motor carriers in addition to its present application to common carriers, and would thereby eliminate the anomalous situation of having motor common carriers subject to maximum penalties of $10,000 or ten years imprisonment, or both, for violations, while subjecting private and contract carriers to a maxmum possible penalty of only $100 for the same violations.

The second bill introduced on behalf of the ICC, S. 1490, to require the registration of private motor carriers with the commission, is to enable the commission to administer its motorcarrier safety and hours-of-service regulations more effectively.

The commission's work with respect to enforcement of its safety and hours-of-service regulations has until recently, because of inadequate personnel, been confined almost entirely to common and contract carriers operating under certificates and permits issued by the commission.

Safety Regulations Violated

Investigations of a number of major accidents have disclosed serious violations of the commission's safety regulations in the operation of non-certificated carriers, it is stated. This is especially true with respect to those aspects of safety which are covered only by the commission's regulations, particularly maximum hours of service of drivers, driver qualifications, and proper maintenance of vehicles. Although no data has been accumulated, it is added, it has been recognized that many very serious accidents are traceable to ignorance or disregard of the commission's regulations by such carriers.

The commission says that its only purpose in requesting legislation requiring the filing of statements by carriers subject only to its safety regulations is to make it possible to send them information and educational material to promote better compliance, and thereby help reduce the number of accidents on the highways. The proposed bill does not contemplate the filing of elaborate reports. It is only necessary that the commission be kept currently informed with respect to the identify of such carriers, their location, and the number of vehicles owned or operated.

Insecticide Resistance

—Continued from page 4

heavy losses through insect damage to cotton, Mr. Ewing cited figures to show that development and use of modern insecticides have had a large part in trebling cotton yields in some areas.

"Farmers who are reaping the benefits of maximum production," he said, "are using the latest improved production practices developed through research, including insect control. Insecticides are the best weapons we have at present to prevent heavy losses from insects, especially during the fruiting period. The increased use of modern insecticides helps to show that insect control has played at least some part in increased production."

He pointed out, for example, that in 1945, before the advent of better insecticides, an average of fifteen pounds of insecticides was used per acre in Arizona and the average yield was 366 pounds of lint cotton. In 1956 about fifty-five pounds were used per acre on cotton in this state, and the average per-acre yield was 1,113 pounds of lint.

"It is interesting and significant to know, however, that the per acre use of insecticides in Arizona has decreased since 1950," Mr. Ewing said. "The average pounds applied per acre was seventy-five in 1950, fifty-six in 1951, sixty-five in 1952, and fifty-five in 1956. Currently high yields indicate that insect losses have been prevented or at least held to a low level. To do this and at the same time reduce the use of insecticides means progress."

AEC Outlines Conditions

—Continued from page 7

will be negotiated on the basis of operating a conceptual plant, capable of processing all the fuel element types now known to be planned for use in power reactors, at a standard daily processing charge of $15,300. Adjustments may be necessary for other types of fuel elements for which costs are substantially higher or lower, or which require modifications of the assumed plant.

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• Contracts will be subject to cancellation by the commission on twelve months notice if the commission finds that fuel element processing services are available commercially at reasonable prices.

• The services will provide for the mechanical, metallurgical and chemical treatment of spent fuel elements and blanket materials and storage of resulting wastes.

• The processing system would yield purified nitrate salt of uranium and plutonium. There will be additional charges (not yet established) for conversion of these products to forms—uranium hexafluoride and plutonium metal—for which commission prices have been established. There will be an additional standard charge to cover process losses and, unless waived by the commission, a use charge for the materials during the normal processing times.

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5—Day "Cincinnatus" double arm 250 and 100 gals.
5—Steel jacketed Powder 50, 225 and 350 cu. ft.
1—Struthers-Wells 6'x9', 304 S.S. Rotating, jacketed.
1—4' dia., 304 S.S. Conical Blender, 3 HP motor.

MILLS

1—Devine 5'x10' steel jacketed Ball Mill.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
1—National 6"x12" Two-Roll Mill, motor driven.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven, NEW.

CENTRIFUGES

2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50", 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
2—Bird 18"x28", 36"x50" steel, continuous, solid bowl.
2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP XP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Fletcher 30" center slung 304 S.S., Perforated basket.

KETTLES, REACTORS, CONDENSERS, EVAPORATORS, TANKS

1—600 gal. 316 S.S. jacketed, agitated Reactor 200# internal pressure, 90# jacket pressure.
2—500 gal. 347 S.S. jacketed, agitated Reactors 300# int. pressure, 75# jacket pressure.
1—1000 gal. nickel clad, jacketed, agitated Reactor.
1—Glascote 500 gal. glass lined, jacketed, agitated Reactor.
3—500 gal. 316 S.S. closed, jacketed, agitated Tanks.
1—3500 gal. 304 S.S. Horizontal Tank 5'6" dia. x 16' long.
3—Unused 2500 gal. Vertical rubber lined Tanks 7'x9'.
1—10,000 gal. Aluminum Tank 10'x16', ½" shell, 25# W.P.
2—10'x30', 8'6"x25' Steel Horizontal Storage Tanks.
2—Kellogg Admiralty Tubes 2200 and 1800 sq ft.
1—Struthers-Wells 536 sq. ft. Heat Exchanger 304 S.S.

FILTERS

1—Oliver 8'x10' Monel Rotary Vacuum.
1—Eimco 18"x12", 316 S.S. Rotary Vacuum.
2—Feinc 3'x1', 316 S.S. Rotary Vacuum with vacuum and receiving Tanks.
1—Feinc 5'x3' Monel Rotary Vacuum String.
1—Oliver 5'3"x8' Steel Rotary Vacuum, totally enclosed.
1—Niagara 230-32 Pressure Filter, 230 sq. ft., 304 S.S.
2—Sparkler 33-S-28 Pressure Filters, 150 sq. ft., 304 S.S.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing.

MISCELLANEOUS

10—Orville Simpson Rotex Sifters 60"x84", 40"x84".
3—Robinson Gyratory Sifters 30"x104", triple deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
10—Nash Vacuum Pumps H7, H6, H5, L5, H4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
15—Chlorimet, Durimet and Duriron Centrifugal Pumps 1½" to 5".

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3—Aluminum, Bubble Cap: (2) 36" dia. x 45 plate; 27" dia. x 18 plate.
1—Aluminum, Perforated Plate: 28" dia. x 36 plate.
6—Copper, Bubble Cap: 24" dia. x 11 plate, 36" dia. x 35 plate; (2) 42" dia. x 20 plate; 42" dia. x 40 plate; 48" dia. x 20 plate.
4—Copper, Tunnel Cap: 24" dia. x 30 plate; 36" dia. x 27 plates; 36" dia. x 39 plate; 36" dia. x 59 plate.
4—Stainless Steel, packed type: 8" dia. x 26' T347; 14" dia. x 25' T304; 24" dia. x 7' T316; 24" dia. x 27' T304.
1—Stainless Steel Rotary Plate Spray Type, 30" dia. x 41 plate T304.
3—Stainless Steel Perforated Plate, 42" dia. x 18 plate, T316 plates, steel shell.
1—Stainless Steel Bubble Cap Section T347, 48" dia.—12 plates.
1—Stainless Steel Baffle Plate or Cascade Type, 60" dia. x 50' high, 63 plates, T304.
1—Stainless Steel Bubble Cap, 64" dia. x 13 plate, T400 series.
1—Steel Bubble Cap, 48" dia. x 22 plates.

COMMINUTORS

1—Fitz. "D", Swinging Blades, St. St.
1—Fitz. "D-6", Fixed Blades, St. St.
1—Fitz. "F-8", Swinging Blades, St. St.

COMPRESSORS

1—Worthington 11 x 7 x 7 Air Comp., 75 HP.
1—Ing. Rand 8 x 6 Air Comp., 30 HP.
1—Nash L-3 Air Comp., 15 HP.
1—Nash MD-573, Bronze, 10 HP.
2—Worthington W-12, 6½" x 6", Air.
2—Spencer Turbo, Size 8, 10 HP.
1—York Ammonia Comp., 12½ x 14½, Steam Driven, 135 ton.
1—De Markus CO_2 Comp., 7½ HP.
1—Taber CO_2 Comp., 7½ HP.

CONDENSERS & EXCHANGERS

3—Stainless Steel Coil Condensers—40 sq. ft. & 55 sq. ft.
10—Stainless Steel Shell & Tube—13, 20, 24, 55, 135, 183, 200, 250, 425, 700 sq. ft.
3—Steel Shell & Tube—325 & 785 sq. ft.
10—Copper Shell & Tube—95, 108, 185, 275, 525, 660, 685, 750 sq. ft.
1—910 sq. ft. Admiralty tubes, steel shell & heads—UNUSED.
15—Aluminum coil & fin type—47 sq. ft. coil.

COOKERS

1—5000 gal. Horiz. Pr. Cooker 6'6" dia. x 20' long, Agit.
1—Contin. Starch Cooker—300 ft. 8" pipe.

COOLERS

2—Hardinge Rotary Coolers, partially submerged type, 8'8" dia. x 30' L and 8'8" dia. x 70' L.
1—Counterflow Pipe Cooler—3700 sq. ft.
1—Vogt Stainless Steel Pipe Cooler, 500 sq. ft. sprayed surface.
1—Stainless Steel Spill Cooler—282 sq. ft. tube surface.

CRYSTALLIZERS

2—Swenson-Walker Crystallizers—30' long.
3—B—S Horiz. 16" dia. x 17' long.
2—450 gal. Stainless Steel Jktd. & Agit. Crystallizing Tanks, 5 HP.
2—B—S Stainless Steel Jktd. & Agit. Crystallizing & Evap. Kettles, 25 HP.

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19 cu. ft. Patterson Blender.
250 cu. ft. Rotary jkt. SS Blender.
C20 Sharples Super-D-Hydrator SS.
C27 Sharples Super-D-Hydrator Monel.
36" x 50" Bird Cont. Centrifuge.
40" SS Bird Sus. Perf. Centrifuge.
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Rotocione Collector Size 36, Type W.
3' x 14' x ¼" steel Column, 75 PSI.
4'x40'x1-1/16" Steel Column, 470 PSI.
Compressor Bury 1600@110#, 300 HP.
2350 sq. ft. Condenser, steel/SS.
5' x 20' x ¼" Rotary Cooler.
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705-20 L.B. Roto Louvre Dryer, SS.
705-24 L.B. Roto Louvre Dryer.
3000 CFM Lectro Dryer, Type CHR.
8'6" x 35' Rotary Dryer.
Screw-type Feeder 4CS B.P. SS.
243D Stokes Oscill. Granulator.
6' x 8' Abbe Ball Mill GPH, unlined.
7' x 18' Patterson Ball Mill 2 Comp.
Jeffrey Hammermills, 15 x 8, 20 x 12.
3620 DIXIE-Non Clog Hammermill.
Penn. Impact Crusher w/50 HP motor.
Micro Pulverizers 2TH & 1W.
Case Packer-Std. Knapp 6/1 gal. cans.
412G Stokes Microvac (NEW).
300 gal. S.S. Jktd. & Agit. Reactor, New.
2000 gal Reactor, 200 PSI
4' x 10' L. B. Screen 2 Deck.
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2—De Laval Multi Clarifiers 300 & 301.

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Sparkler Stainless Filter Model 14S-8.
#2 Sweetland Filter, 12 Stainless covered leaves & other sizes. Oliver Filters.
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
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Stainless, alum., copper, glass lined, lead lined and steel kettles and tanks.

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Pebble Mills 24"x30", 30"x30", 30"x34", 30"x42", 4'x5'. Also jar mills.
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2—#0000 Raymond Mills.
Sturtevant #00 Swing Sledge Mill, 3 HP.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ HP Colloid Mills.

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Day Imperial 75 & 150 gal. Jack. Mixers.
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Kent 3 HP, continuous Dry Mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. Spiral Mixer.
Day Brighton 20 gal. Change Can Mixers.
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10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
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1—Stainless Steel Vertical Storage Tank, 9000 gallons.

1—Vertical Stainless Steel Storage Tank, 4000 gallons.

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1—Allis Chalmers Rotary Dryer, 7'6" x 64'.

1—Buflovak Double Drum Dryer, 42" x 120", ASME Code.

Stokes Stainless Steel Rotating Vacuum Dryer, 6'x10' (New).

1—Stokes Double Drum Dryer, 5' x 12', complete, ASME.

1—Hardinge Rotary Dryer, 5'x50'.

1—Hardinge Rotary Dryer, 7'6" x 55'.

1—Link Belt Stainless Steel Roto Louvre Dryer, Model 207-14.

3—Link Belt Steel Roto Louvre Dryers, Models 207-10, 310-16 and 502-20.

3—Tolhurst Suspended Type Centrifuges, with 32" Imperforate Steel Baskets, complete.

3—Sharples Stainless Steel Super-Pressurite Centrifuges, Model 16Y.

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1—Republic 15" Flexmaster Stainless Steel Filter, 15 chambers.

2—Ertel Stainless Steel Filters, 12", 20 leaves.

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1—Ames 500 HP Steam Generator, 125 PSI.

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1—Stokes Model R Tablet Machine.

6—Stokes Model F Tablet Machines.

1—Vulcan Steel Bubble Cap Column, 24" x 30', 20 trays, ASME (New).

Bird Continuous Centrifugal Steel Filter, 24"x38".

1—Vulcan Steel Bubble Cap Column, 18" x 25', 18 trays, ASME (New).

1—Vulcan Steel Bubble Cap Column, 42" x 30', 20 trays, ASME (New).

1—Foster Wheeler Dowtherm Unit, 600,000 BTU.

1—Vulcan Stainless Steel Condenser, 200 sq. ft.

1—Baker Perkins Ter Meer, Type 316 Stainless Steel Centrifugal Filter, Model HS-24".

1—AT&M Stainless Steel Suspended Type Centrifuge with 18" Perforated Basket, complete.

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20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Sperry Filter Press 42", open del., 83 plates & frames—like new.
60—New Pressure Cookers, 18"x18" & 24"x28".
1—New Glass Nash Centrifugal Pump, 160gpm.
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1—Raymond 8" Hammer Mill, like new
2—Louisville Steam Tube Dryers 6'x35'.
1—New Louisville Continuous Filtering Machine.
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1—#316 Stainless Reactor, 265 gals. cap. jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 17"x27".
1—Patterson Ball Mill, 42x36, jacketed.
2—Large Steam Jacketed Horizontal Mixers.
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2—Ball & Jewell #2 Cutters with 75 H.P. Motors.
1—J. H. Day 3-roll Mill 9x16.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—#10 Day 300 gal. Jacketed Sigma Blade Mixer.
4—New Heat Exc. 60' with Cupro Nickel Tubes.
1—Sparkler Stainless Filter Model 33-S-9.
3—4'x8' Shaker Screens.
6—W & P Mixers, jacketed, heavy duty, sigma blade, 200 gal. with hydraulic dumpers.
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4—Filter presses 24" P & F, IRON, Sperry & Shriver.
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2—Stokes model T tablet presses.
1—Stokes model R tablet press.
19—Kux #61—2½" tablet press.
3—Stainless Purocel filters, 75 sq. ft. each.
3—Colton automatic tube fillers model #17-TF—14-AF.
1—Standard Knapp #429 gluer and sealer.
2—New Simpson mixers #0, 24" diameter.
6—Pfaudler glass lined jacketed reactors, 5 to 500 gallons.
1—Swenson double effect evaporator, 835 sq. ft.
1—Baker Perkins 250 gallon jacketed dispersion blade mixer.
20—Stainless steel kettles, jacketed, 40 to 250 gallons.
6—J. H. Day double arm jacketed mixers, 50 to 75 gallons.
1—Stainless Zenith de-watering press.
2—Baker Perkins 2½ gallon sigma bladed mixers, 1 stainless.
8—Day powder mixers (50 to 7500#)
4—Devine vacuum shelf dryers (3, 5, 10 shelf) 40 x 44".
2—Fitzpatrick models D & K.

**The above are a few samples of a one million dollar inventory.*

CHEMICAL & PROCESS MACHINERY CORP.
52 Ninth Street • HYacinth 9-7200 • Brooklyn, N. Y.

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From our latest Bulletin A-38
Write for copy

1—Day Stainless Steel Double Arm Sigma Blade Mixer, 350 gals.
1—W & P Mixer 100 gal. jacketed, double arm.
2—Stokes Model "R" Tablet Machines, variable speed drive w/3 H.P. motors.
1—Stokes "DD-2" Rotary Tablet Machine.
2—Devine #28 Double Door Vacuum Shelf Dryers.
2—#12 Sweetland Filters, 36 monel leaves on 4" centers.
1—Steel jack., agitated Kettle, 800 gals.
1—Steel jack. Kettle, 1000 gals.
3—Day & Ross, 15-50 gal. Pony Mixers.
2—Fletcher 48" S.S. Extractors.
1—Inconel Heat Exchanger, 195 sq. ft.
1—Allbright Nell 4' x 9' Double Drum Dryer.
2—Patterson 4' x 5' and 5' x 6' Pebble Mills.
5—Rotex Screens, 20" x 48" to 40" x 84".
1—Stainless Steel Rotary Dryer, 30" x 18' w/flights.
1—Davenport 6' x 30' Rotary Steam Tube Dryer.
1—Erie City Economic 150 H.P. Boiler 125 p.s.i.

We Buy Single Items to Complete Plants

The Machinery and Equipment Corp.
293 Frelinghuysen Ave., Newark 12, N. J.
TA 4-2050
Harry Pearlman, Pres. Bill Wolf, Vice-Pres.

FMC

REBUILT EQUIPMENT HAS NEVER BEEN SO LOW PRICED in RELATION to VALUE

Swenson Quadruple Effect Long Tube Evaporator; film type.

Zaremba Double Effect INCONEL Evaporator with Calandria; 430 sq. ft.

Zaremba Single Effect Cast Iron Evaporator: 130 sq. ft. copper tubes.

Devine Single Effect Cast Iron Evaporator; Calandria; 28"x8'.

Zahn & Nagel Continuous Evaporator, 2500 lbs. per hour evaporation.

Mojonnier Stainless Steel Vac. Pan, 3' x 10', with Calandria; entrainment.

2 Vertical Calandrias; 500 # sq. in. heads ASME; 310 sq. ft. surface.

Stainless Steel Columns; 14" x 26'8" and 8⅝" x 19'.

FRED R. FIRSTENBERG, *Pres.*

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209-289 TENTH ST.
BROOKLYN 15, N. Y.
STerling 8-4672

Business Wants and Offers

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NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication.

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER
30 Church st., New York 7, N. Y.

EQUIPMENT OFFERED

For Sale: 42" x 120" double drum dryer; 42" x 100" double drum Dryer; 42" x 90" double drum Dryer; 24" x 36" double drum Dryer; 700 gal. and 3,000 gal. S.S. Tanks; 93 sq. ft. S.S. Heat Exchanger ASME; three S.S. Sanitary Heat Exchangers to 150 sq. ft.; 110 gal. S.S. jacketed Blender ASME; 75 gal. S.S. sigma blade jacketed Mixer. Best Equipment Company, 1737 Howard Street, Chicago 26, Illinois. AMmbassador 2-1452.

For Sale—One large and one small W & P Mixer, large tumbling Barrels, Air Compressors, large carton stitching machines, Hydraulic Presses, large and small Blowers and Exhausters, 3 large Drums Pigmentar. OPD 297.

Day, Wood and enamel, double spiral dry powder Mixer and Sifter 400 to 600 lbs. with chain and motor: Excellent condition. Two vibrators as well as motor driven can sealer. Talmalin Mfg. Co., 611 B'way, N.Y.C., Phone ALG. 4-1932 or TRA 3-8903.

One 1951 Permutit Type Q Water Softener one million gallons between regeneration. Two 6" Premier Colloid Mill. Stainless Steel Tanks type 316 sizes 50 to 850 gallons. 6 Lightnin Mixers. Stainless Steel Pails-Centrifugal Pumps, etc. Nazzaro Enterprises, 18 Market Street, Paterson, New Jersey. Tel Armory 4-9716.

EQUIPMENT WANTED

Wanted Immediately—#7 Sweetland Filter Press 2" centers. Give full details, price, condition, serial number, location. OPD 301.

1000-1500 gallon stainless steel kettle, dished bottom, with or without jacket or agitator. Please describe fully, and give prices in first letter. OPD 303.

1—Fitzpatrick Comminutor stainless; 1—High speed centrifuge, lab size stainless; 1—3 deck Sweco separator stainless 18 or 48 inch; 1—20 to 100 gph stainless homoginizer; 1—4 qt. batch ice cream freezer. Detailed description, model numbers and price. OPD 284.

EQUIPMENT WANTED

Wanted—Used 13 gallon I.C.C. carboys in good condition. Ulster 3-2200 or write OPD 293.

Equipment Wanted: Rotary Dryer or Cooler 6 or 7' diameter, about 30-35' long. Describe fully and complete. Give price in first letter. Aroostook Federation of Farmers, P.O. Box 271, Caribou, Maine.

Ross Conical Burr Stone Mill, style 1; size 4; vertical type; with gear drive. Adaptable for grinding lubricating greases. OPD 278.

FACILITIES OFFERED

Chemical Mixing and Packaging, cost plus basis. Liquid or powder. Our formulation or yours, one drum or truckload. Metropolitan New York-New Jersey area. OPD 302.

FACILITIES WANTED

Bulk Storage Facilities for oil, solvents and chemicals needed. Will consider long-term lease or purchasing plant outright. Also need custom refining facilities. OPD 292.

FOR RENT

Newark, N. J., 16,500 sq. ft. desirable industrial property. One and two story brick buildings—sprinklered. High pressure steam. C.R.R.N.J. siding. Excellent for Chemical manufacturing. 1 minute from Pulaski Skyway and Jersey Turnpike. Principals only. OPD 288.

FOR SALE

Available—Fully equipped paint plant, lab, office, yard, underground tanks. Inspection upon request. Will lease or sell. OPD 290.

For Sale: Liquidating large inventory hose for chemical industry—suction, discharge, gas, oil, acid, asphalt, and tar—rubber, bronze, and steel types—all at 50 per cent of factory price—write for our listing—M. Berger and Company, Pittsburgh Terminal Warehouse, Pittsburgh 19, Pa.

FOR SALE

Dehydrating Plant still set up; Davenport 6' x 30' Steam Tube Dryer; Erie City 150 H.P. Economic Boiler 125 p.s.i. #6 oil; 10,000 gal. Fuel Oil Tank; Williams Hammermill 30 H.P.; Union Special Bag Sewer; 23' and 40' Bucket Elevators; 6" and 9" Screw Conveyor; Cyclone and Stocking Collectors; Steel Hoppers; Piping, etc. All equipment motor driven. Can be inspected in New Jersey plant where still in operation. The Machinery & Equipment Corp., 293 Frelinghuysen Ave., Newark 12, N. J. TAlbot 4-2050.

MATERIALS OFFERED

Lithium Chloride, manufactured by Metalloy Corp., div if Lithium Corp. of America. 10—300 lb. unopened fibre drums (3000 lbs.) Any part or the lot—$.50 per lb. net. FOB Cleveland, Ohio.

Bang-Up Special Potassium Perchlorate; Ammonium Perchlorate; Calcium Phosphide, and to repair damage; Mercurophylline, Sodium Morrhuate and Sodium Indigotindisulfonate. All way below market. Industrial By-Products & Surplus Co., 40-40 Lawrence Street, Flushing 54, N. Y. INdependence 1-4100.

MATERIALS WANTED

Wanted: Acetic Acid and/or acetic anhydride, off-grade, sub-standard or surplus acceptable. Prefer continuous supply. OPD 296.

POSITIONS WANTED

Chemist: Production and control. 20 years diversified manufacturing experience: 10 years plant supt capable handling safety, purchasing, shipping, warehousing, pipefitting. Knowledge pumps, mills, stills, extractors, etc. Available immediately. OPD 286.

Administrative Assistant to general manager. Graduate chemist, 40, with extensive technical and administrative experience desires to advance in administrative field with food, Petroleum, Chemical, or Essential Oil firm. Material control, coordination, troubleshooting, expediting, supervision, a quality control. OPD 294.

Synthetic Organic chemist. Advanced degrees; advanced experience. Supervise development of new organic chemicals; laboratory, pilot plant and plant production. Engineer's license. Salary expected: high. Address Box No. 295, care of this paper

REPRESENTATION WANTED

Sales Managers if you have any chemicals you wish sold in this area would appreciate details. Presently representing in New York metropoliton area manufacturers of specialties and raw materials for food, cosmetics and textiles. References from principals now represented available upon request. OPD 298.

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One of the first manufacturers of vinyl coatings has a few territories open for agents with ability to produce. Reply to Box No. 299, Oil, Paint and Drug Reporter, 30 Church Street, New York 7, N.Y.

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Drug Store Prescriptions

—Continued from page 5

crease of over 200 percent experienced in 1956, however, will almost certainly not be equaled, it was added.

As in 1955, the broad-spectrum antibiotic "Achromycin" (Lederle) was the single drug most frequently prescribed, unless "Equanil" (Wyeth) and "Miltown" (Wallace), identical tranquilizing drugs marketed under different trade names, are counted as a single item. All in all, the ten leaders included four tranquilizing preparations in 1956, against two in 1955, the institute said.

Sedatives, Vitamins Hold Volume

The total population increase in 1956 is estimated at 1.5 percent, but at both ends of the life span—young children and the aged, both of whom are heavy drug consumers—the increase was somewhat greater. Measured against this benchmark, a number of drug categories in the prescription field barely managed to hold their own in 1956. This was true of sedatives and hypnotics, vitamins, and sulfa drugs and other antibacterials (excluding antibiotics). Chief losers were hematinics and nutritional supplements (excluding vitamins) though the declines shown did not exceed 10 percent.

In the past, Medimetric figures on prescription volume have been somewhat higher than those from government and other industry sources. The institute emphasizes, however, that its findings are based on highly refined statistical "probability sampling," the only method, it says for which margins of error can be given with authority.

Careful controls indicate mathematical odds of nine to one that the 1956 figures of the Medimetric Institute are off by less than 5 percent either way, the institute said.

The institute views the outlook for the prescription market in 1957 with cautious optimism. Assuming that general business conditions will continue at their present level, the flattening of the growth curve for tranquilizing drugs may nevertheless be reflected in a proportional overall increase somewhat lower than in the past year, perhaps as low as 5 percent.

The effects of the increasingly competitive situation in the major drug categories are uncertain, but the introduction of new drugs of dramatic effectiveness is likely to shift the figure upward, even though full impact is usually not felt for many months. A 1957 volume of 700 million prescriptions is not beyond the realm of possibility, the institute said.

Dow Asks Tolerances For Ethylenedibromide

Dow Chemical Company, Midland, Mich., has filed a petition with the Food and Drug Administration for tolerances ranging from thirty to 200 parts per million for residues resulting from the use of ethylenedibromide to fumigate the soil in connection with the production of a selected list of agricultural products.

A petition also has been filed with the FDA by United States Rubber Company proposing a tolerance of three parts per million for residues of 2,3-dichloro-1,4-naphthoquinone in or on apples and peaches.

Grace Polymer Div.

—Continued from page 5

plastics fabricators in the country are located in a 300-mile radius. In addition, we are establishing regional sales offices in other key centers throughout the country such as Chicago and Los Angeles. Also, the New York area is an important market place for all plastic fabricators in the United States and we expect to help them when they visit this section to meet with their own customers.

"The importance of being close to your customers is to be as close to their problems as they are themselves," Mr. Miller continued. "Many manufacturers of plastic toys or housewares rely on raw material producers, such as ourselves, to answer technical questions and function as their research and service laboratory. With our equipment and application know-how, we expect to be able to work out many technics in dealing with this new resin that will help our future customers.

'Our service engineers are developing new technics for molding and extruding polyethylene in rigid materials as well as film and sheet almost every day. The sum total of our research and development program is to know all the facts about "GREX," the trade name of our new resin."

Baton Rouge 'Excellent Site'

E. E. Winnie, vice-president of polymer, said in an interview today, "We are not only pleased with our convenient metropolitan location but we are pleased as well with our selection of Baton Rouge, La., as an excellent plant site for the manufacture of our polyethylene resin." Mr. Winnie continued, "We purchased over 150 acres of land in Baton Rouge for our plant site in February of 1956. This location is only four miles from our most important raw material source, ethylene gas made by Esso Standard Oil Company, which has one of the largest petroleum refineries in the world in Baton Rouge."

"Mr. Winnie added, "Construction of our semi-works plant for experimental pilot plant quantities of our "GREX" resin was begun immediately. Simultaneously, we broke ground for our main plant with an annual capacity of 50 million pounds of resin."

Polymer's semi-works plant was completed in July of 1956 and a steady stream of white polyethylene pellets is being shipped to Clifton for quality control studies and customer evaluation.

The main plant in Baton Rouge, now under construction, will be completed by the middle of 1957.

Synthetic Fibers Have

—Continued from page 7

and women's suitings and outerwear, in blankets, and in pile fabrics. They are not attacked by moths, mold, mildew, or insects, which is a great consumer interest in view of the $100 million loss resulting from moth damage alone in this country. As synthetic fibers do not absorb moisture to any appreciable extent, garment fabricated from them have wrinkle-resisting properties and can be given semi-permanent heat set creases. They generally have low specfic gravities, which results in bulk without weight for excellent covering power.

Other Uses

Among promising new or under-development uses of synthetic fibers, Dr. Soday listed the fabrication of tarpaulins and tents with substantial weight saving, inflatable buildings supported by only a few ounces of air pressure, collapsible tanks and containers and air "springs" for cars and trucks.

The potential market for synthetic fibers in tarpulins and tents alone, Dr. Soday said, is estimated at nearly 70 million pounds per year.

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TRIHYDROXYBENZENE—1Y0 kgs, D F Young, London

TUNG OIL—380 tons, C Tennant Sons & Co, Buenos Aires
219 tons, Buenos Aires

ULTRAMARINE BLUE—20 bgs, Whittaker Clark Daniels, Hull

UREA—1,500 bgs, Nylos Trading Co, Genoa

URTICAE LEAVES—7 bls, S B Penick & Co, Rijeka

VANILLA BEANS—12 cs, Zink & Trieste, Tamatave
24 cs, Ufinindo International Corp, Tamatave
97 cs, Gillespie & Co, Antalaha
135 cs, Thurston & Braidich, Antalaha
160 cs, J Manheimer, Antalaha
25 cs, Lo Curto & Funk, Antalaha
44 cs, National City Bank, Antalaha

VETIVER OIL—1 dm, Norda Essential Oil & Chemical Co. Port Au Prince
2 dms, Ufinindo International Corp, Durban

VITAMIN B.—30 dms, Takamine Overseas Inc, Yokohama

WATTLE EXTRACT—561 bgs, International Products Corp, Durban
427 bgs, Barkey Importing Co, Durban

WHITING—300 bgs, Hammill & Gillespie, Hull
800 bgs, Smith Chemical & Color Co, Hull
800 bgs, Pluess Staufer, Antwerp
1,200 bgs, N H Weitzner, Antwerp

WOOL GREASE—5 bbls, Charles of the Ritz, Bremen
6 dms, Hummel Chemical Co, Rotterdam
52 dms, Chemical Bank, Antwerp

Philadelphia

AMMONIUM BICARBONATE—150 dms, Chemical Manufacturing Co, Middlesbrough

CALCIUM PHOSPHATE, DIBASIC—404 bgs, Wessel Duval & Co, Antwerp

EUCALYPTUS OIL—5 dms, Phila National Bank, Lisbon

FISHLIVER OIL—25 dms, Yokohama

GLYCERINE—109 tons, Buenos Aires

GRAPHITE—200 bgs, Asbury Graphite Mills, Tamatave
600 bgs, Joseph Dixon Crucible Co, Tamatave

NAPHTHALENE—1,667 bgs, Rotterdam
950 bgs, Hull
628 bgs, Middlesbrough

SESAME SEED—780 bgs, B C Ireland, San Juan del Sur

SHELLAC—100 bgs, Brown Bros, Bremen

SODIUM NITRATE—2,000 tons, Guaranty Trust Co, Tocopilla

UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Middlesbrough

VANILLA BEANS—36 cs, Camax Co, Vera Cruz
102 cs, Tamatave
381 cs, Antalaha

ZINC CYANIDE—5 dms, Chemical Manufacturing Co, Middlesbrough

San Francisco

CALCIUM CHLORIDE—1,500 bgs, Bank of California, Rotterdam
100 bgs, P W Bellingall, Rotterdam

MACE—14 cs, H M Newhall & Co, Rotterdam

NUTMEG—68 bgs, Rotterdam

POPPY SEED—50 bgs, Durkee Famous Foods, Rotterdam
100 bgs, B C Ireland, Rotterdam

VANILLA BEANS—7 cs, Wm Dimond & Co, Papeete

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EVAPORATOR, VACUUM PAN & STILLS

1—Artisan 450 sq. ft. Stainless Steel, Single Effect Evaporator complete with piping. receiver, separator, condensate pump and condenser with recording instruments.
1—2' dia. Stainless Steel Vacuum Pan, 100 gallons with condenser.
1—7' dia. cast iron Vacuum Pan with piping, condenser and vacuum pump.
1—Barnstead 25 gal. per hour Water Still.
1—Patterson-Kelly 12" dia. x 14' Stainless Steel Column.

REACTORS, KETTLES, TANKS & CONDENSERS

2—Pfaudler 250 gal. glass lined, jacketed, agitated Reactors.
4—Pfaudler 300 and 500 gal. glass lined, jacketed Kettles.
1—Vulcan 1220 sq. ft. Heat Exchanger, stainless shell and tubes.
1—Unused 947 sq. ft. Heat Exchanger, 304 S.S. tubes.
1—Struthers-Wells 500 sq. ft. Heat Exchanger, stainless shell and tubes.
5—1000 gal. Stainless Steel Clad Vertical Storage Tanks.
2—Langenskamp 600 gal. Stainless Steel agitated Tanks with coils.

CENTRIFUGES & FILTERS

1—Bird 18"x28" Solid Bowl Continuous 316 S.S.
5—Sparkler Model 33-S-28 Pressure Filters 304 S.S., 150 sq. ft.
1—Niagara Model 230-36 Pressure Filter, 304 S.S., 230 sq. ft.
1—Oliver 3'x1' Steel Rotary Vacuum Filter.
1—Sharples #16 Monel Super Centrifuge.
2—Sharples #16 Steel Super Centrifuges.
1—Fletcher 30" Stainless Steel, Under Driven Centrifugal.

PULVERIZERS, MIXERS & SCREENS

1—Patterson 6' dia. Steel Conical Blender, 15 HP motor.
1—Abbe 4 gal. Double Arm, jacketed Mixer.
1—Williams 30 HP Ball Bearing Hammermill.
2—Enterprise #160 Grinders with 20 HP motors.
1—Eppenbach 1 HP Homo Mixer.
2—Sprout Waldron 40"x84" Stainless Steel Gyratory Sifters.

DRYERS

4—Buflovak, Devine, Vacuum Shelf Dryers 20, 19, 18 and 10—42"x42" shelves with piping, condensate pumps and condensers.
2—Bartlett & Snow 6'x30' Styoe "M", Direct Heat Rotary Dryers.

PUMPS

20—1" to 3" Stainless Steel Centrifugal and Rotary Pumps.
1—Nash #TS-7 Two-Stage Vacuum Pump.
2—Nash #AL-673 Vacuum Pumps.
2—J. P. Devine Horizontal Vacuum Pumps, 7½ HP motors.

MISCELLANEOUS

1—I. R. 150 Ton Jet Refrigeration Unit.
1—Frick 15 Ton Refrigeration Unit.
25—Motors 1 to 25 HP, 3/60/220 and 440 volt.
450 Feet Stainless Steel piping and fittings 1" to 4".

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BRILL EQUIPMENT COMPANY
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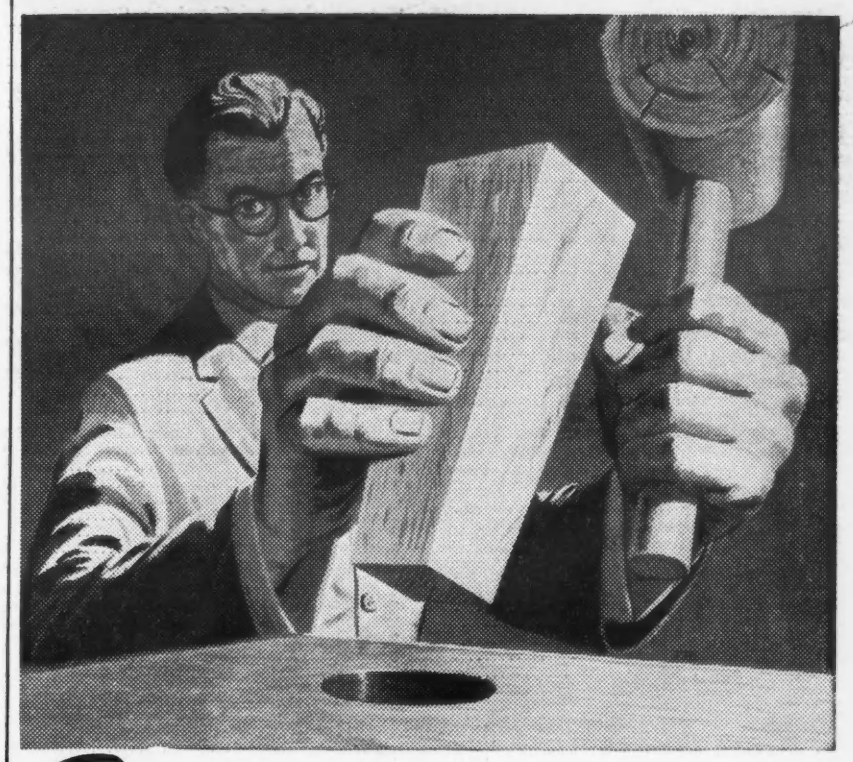

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